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JULY 1953

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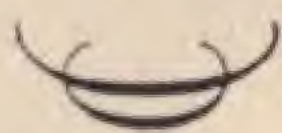
LIVING IN A SPACE STATION By WILLIE LEY

JULY 1953

GALAXY

Science Fiction

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Galaxy

SCIENCE FICTION

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OLD LAWS—NEW USES

NOT long ago, I stated in an editorial that every social action produces an equal and opposite reaction. That, of course, was Newton's third law of motion applied to sociology, and it was offered as a useful tool for probing the future.

A tool, please note, not a key—if there is one, I haven't encountered it.

As a formula, the application of Newton's law is far less sterile and much more realistic than the linear theory of history, which claims that the future will be very much like the present, only more so. One example of linear thinking is the belief that the recent trend toward less and lighter clothing will result in universal nudism. Actually, a trend in the opposite direction is visibly gathering momentum. I have no idea where it will end, but perhaps you remember my pointing out that the exhibitionism of the early 19th Century resulted in Victorianism.

There's another old law on the books, this time in economics—Gresham's law: "Bad money drives out good money"—that I have found richly helpful in extrapolation.

Here are some extensions of Gresham's law:

- Bad politics drives out the good. This has at least two barrels—both good politics and good people are driven out. Such political truncations as underground movements and exile governments are evidence of the first. The hundreds of thousands of refugees from Nazism and now Communism tragically prove the second; less drastic examples are those citizens who move away from corrupt communities.

- Bad culture drives out good. Never in history has hackwork supported so many artists, writers, composers, actors and dancers so bountifully. Would they have become great if they hadn't commercialized their ability? Certainly not all, but there's no doubt that some major talents were lost.

- Bad science drives out good. When Lysenkoism became the official theory, Soviet biology withered to mere dogma. Their psychiatry, shunning Freud, has long been mechanistic, and Lord knows what will happen to medicine there, now that it's been put under racist attack.

- Slang drives out good language.

This extension of Gresham's law really interests me, for the

future of language is a big, challenging puzzle to every science fiction author.

The Story of English by Mario Pei, published by Lippincott, is the most stimulating book I've found on the subject. It has special value for writers, but readers will find it no less fascinating, for it dramatically examines the past and present and shrewdly speculates on the future of the language.

Considering the travail of English recorded by Mr. Pei, it seems foolhardy to guess at the tongue or tongues our far descendants will speak. In less than a millenium, English has changed so vastly that a modern German or Scandinavian, sent back in time to the days of Chaucer, would understand more than a monolingual Britisher or American.

As noted before, slang drives out good language. But, says Mr. Pei, slang also drives out slang—who today uses “23 skiddoo,” “cat’s whiskers,” “lounge lizard,” “flapper,” and other relics of only a few decades ago? In the same way, current jargon is mostly bound to be evicted by newer and perhaps as ephemeral terms. Mostly, not all, for “One insidious quality of slang,” writes the author, “is its tendency to seep into the standard language until it becomes the standard language itself.”

As examples, he offers *me-thinks*, *encroach*, *purport*, *until*, *devoid*, *nowadays*, *furthermore* and *wherewithal*, which once were attacked as slang.

Near Plymouth in England is Torpenhow Hill: *tor*, Saxon; *pen*, Celtic; *how*, Scandinavian *haugr*; *hill*, Middle English—translating to Hillhillhill Hill!

After being invaded from every side, English is now invading other languages. *Tegedizi* is the Italian version of “Take it easy;” Japan has adopted *O Kei*, *koka-kora* and its competitor, *pepusi-kora*, and the very insulting *basadu* and *sutinka*; the Chinese call “humor” *yuh meh*, play *p’u k’e* with chips, and use the *te lu fêng* to call up their friends.

GRESHAM’S law is only half right; it doesn’t help a bit in foretelling the point at which the good eventually turns and drives out the bad. That inevitably happens, as history verifies. It applies to money and language, at any rate, and we can see improvement in TV, movies and publishing as a result of public surfeit with junk and nonsense. Every tyranny commits a final outrage that brings about its ruin.

What is the other half of Gresham’s law? Why, old Sir Isaac’s third law of motion, of course.

—H. L. GOLD



By **CLIFFORD D. SIMAK**

KINDERGARTEN

*Why should anyone fear an object meant only
to make people happy? No reason except—who
sent it, from where, with what motivation?*



Illustrated by **SIBLEY**

GALAXY SCIENCE FICTION



HE went walking in the morning before the Sun was up, down past the old, dilapidated barn that was falling in upon itself, across the stream and up the slope of pasture ankle-deep with grass and summer flowers, when the world was wet with dew and the chill edge of night still lingered in the air.

He went walking in the morning because he knew he might not have too many mornings left; any day, the pain might close down for good and he was ready for it—he'd been ready for it for a long time now.

He was in no hurry. He took each walk as if it were his last and he did not want to miss a single thing on any of the walks—the turned-up faces of the pasture roses with the tears of dew running down their cheeks or the matins of the birds in the thickets that ran along the ditches.

He found the machine alongside the path that ran through a thicket at the head of a ravine. At first glance, he was irritated by it, for it was not only unfamiliar, but an incongruous thing as well, and he had no room in heart or mind for anything but the commonplace. It had been the commonplace, the expected, the basic reality of Earth and the life one lived on it which he had sought in coming to this abandoned farm, seeking out a place where he might stand on ground of his own choosing to meet the final day.

He stopped in the path and stood there, looking at this strange machine, feeling the roses and the dew and the early morning bird song slip away from him, leaving him alone with this thing beside the path which looked for all the world like some fugitive from a home appliance shop. But as he looked at it, he began to see the little differences and he knew that here was nothing he'd ever seen before or heard of—that it most certainly was not a wander-

ing automatic washer or a delinquent dehumidifier.

FOR one thing, it shone—not with surface metallic luster or the gleam of sprayed-on porcelain, but with a shine that was all the way through whatever it was made of. If you looked at it just right, you got the impression that you were seeing into it, though not clearly enough to be able to make out the shape of any of its innards. It was rectangular, at a rough guess three feet by four by two, and it was without knobs for one to turn or switches to snap on or dials to set—which suggested that it was not something one was meant to operate.

He walked over to it and bent down and ran his hand along its top, without thinking why he should reach out and touch it, knowing when it was too late that probably he should have left it alone. But it seemed to be all right to touch it, for nothing happened—not right away, at least. The metal, or whatever it was made of, was smooth to the hand and beneath the sleekness of its surface he seemed to sense a terrible hardness and a frightening strength.

He took his hand away and straightened up, stepped back.

The machine clicked, just once, and he had the distinct impres-

sion that it clicked not because it had to click to operate, not because it was turning itself on, but to attract attention, to let him know that it was an operating machine and that it had a function and was ready to perform it. And he got the impression that for whatever purpose it might operate, it would do so with high efficiency and a minimum of noise.

Then it laid an egg.

Why he thought of it in just that way, he never was able to explain, even later when he had thought about it.

But, anyhow, it laid an egg, and the egg was a piece of jade, green with milky whiteness running through it, and exquisitely carved with what appeared to be *outré* symbolism.

He stood there in the path, looking at the jade, for a moment forgetting in his excitement how it had materialized, caught up by the beauty of the jade itself and the superb workmanship that had wrought it into shape. It was, he told himself, the finest piece that he had ever seen and he knew exactly how its texture would feel beneath his fingers and just how expertly, upon close examination, he would find the carving had been done.

He bent and picked it up and held it lovingly between his hands, comparing it with the

pieces he had known and handled for years in the museum. But now, even with the jade between his hands, the museum was a misty place, far back along the corridors of time, although it had been less than three months since he had walked away from it.

"Thank you," he said to the machine and an instant later thought what a silly thing to do, talking to a machine as if it were a person.

The machine just sat there. It did not click again and it did not move.

So finally he left, walking back to the old farmhouse on the slope above the barn.

IN the kitchen, he placed the jade in the center of the table, where he could see it while he worked. He kindled a fire in the stove and fed in split sticks of wood, not too large, to make quick heat. He put the kettle on to warm and got dishes from the pantry and set his place. He fried bacon and drained it on paper toweling and cracked the last of the eggs into the skillet.

He ate, staring at the jade that stood in front of him, admiring once again its texture, trying to puzzle out the symbolism of its carving and finally wondering what it might be worth. Plenty, he thought—although, of all con-

siderations, that was the least important.

The carving puzzled him. It was in no tradition that he had ever seen or of which he had ever read. What it was meant to represent, he could not imagine. And yet it had a beauty and a force, a certain character, that tagged it as no haphazard doodling, but as the product of a highly developed culture.

He did not hear the young woman come up the steps and walk across the porch, but first knew that she was there when she rapped upon the door frame. He looked up from the jade and saw her standing in the open kitchen doorway and at first sight of her he found himself, ridiculously, thinking of her in the same terms he had been thinking of the jade.

The jade was cool and green and she was crisp and white, but her eyes, he thought, had the soft look of this wondrous piece of jade about them, except that they were blue.

"Hello, Mr. Chaye," she said.

"Good morning," he replied.

She was Mary Mallet, Johnny's sister.

"Johnny wanted to go fishing," Mary told him. "He and the little Smith boy. So I brought the milk and eggs."

"I am pleased you did," said Peter, "although you should not

have bothered. I could have walked over later. It would have done me good."

He immediately regretted that last sentence, for it was something he was thinking too much lately—that such and such an act or the refraining from an act would do him good when, as a matter of plain fact, there was nothing that would help him at all. The doctors had made at least that much clear to him.

HE took the eggs and milk and asked her in and went to place the milk in the cooler, for he had no electricity for a refrigerator.

"Have you had breakfast?" he asked.

Mary said she had.

"It's just as well," he said wryly. "My cooking's pretty bad. I'm just camping out, you know."

And regretted that one, too.

Chaye, he told himself, quit being so damn maudlin.

"What a pretty thing!" exclaimed Mary. "Wherever did you get it?"

"The jade? Now, that's a funny thing. I found it."

She reached a hand out for it.

"May I?"

"Certainly," said Peter.

He watched her face as she picked it up and held it in both hands, carefully, as he had held it.

"You found this?"

"Well, I didn't exactly find it, Mary. It was given to me."

"A friend?"

"I don't know."

"That's a funny thing to say."

"Not so funny. I'd like to show you the—well, the character who gave it to me. Have you got a minute?"

"Of course I have," said Mary, "although I'll have to hurry. Mother's canning peaches."

They went down the slope together, past the barn, and crossed the creek to come into the pasture. As they walked up the pasture, he wondered if they would find it there, if it still was there—or ever had been there.

It was.

"What an outlandish thing!" said Mary.

"That's the word exactly," Peter agreed.

"What is it, Mr. Chaye?"

"I don't know."

"You said you were given the jade. You don't mean . . ."

"But I do," said Peter.

They moved closer to the machine and stood watching it. Peter noticed once again the shine of it and the queer sensation of being able to see into it—not very far, just part way, and not very well at that. But still the metal or whatever it was could be seen into, and that was somehow uncomfortable.

Mary bent over and ran her fingers along its top.

"It feels all right," she said. "Just like porcelain or—"

The machine clicked and a flagon lay upon the grass.

"For you," said Peter.

"For me?"

PETER picked up the tiny bottle and handed it to her. It was a triumph of glassblower's skill and it shone with sparkling prismatic color in the summer sunlight.

"Perfume would be my guess," he said.

She worked the stopper loose.

"Lovely," she breathed and held it out to him to smell.

It was all of lovely.

She corked it up again.

"But, Mr. Chaye . . ."

"I don't know," said Peter. "I simply do not know."

"Not even a guess?"

He shook his head.

"You just found it here."

"I was out for a walk—"

"And it was waiting for you."

"Well, now . . ." Peter began to object, but now that he thought about it, that seemed exactly right—he had not found the machine; it had been waiting for him.

"It was, wasn't it?"

"Now that you mention it," said Peter, "yes, I guess it was waiting for me."

Not for him specifically, perhaps, but for anyone who might come along the path. It had been waiting to be found, waiting for a chance to go into its act, to do whatever it was supposed to do.

For now it appeared, as plain as day, that someone had left it there.

He stood in the pasture with Mary Mallet, farmer's daughter, standing by his side—with the familiar grasses and the undergrowth and trees, with the shrill of locust screeching across the rising heat of day, with the far-off tinkle of a cowbell—and felt the chill of the thought within his brain, the cold and terrible thought backgrounded by the black of space and the dim endlessness of time. And he felt, as well, a *reaching out* of something, of a chilly alien thing, toward the warmth of humanity and Earth.

"Let's go back," he said.

THEY returned across the pasture to the house and stood for a moment at the gate.

"Isn't there something we should do?" asked Mary. "Someone we should tell about it?"

He shook his head. "I want to think about it first."

"And do something about it?"

"There may be nothing that anyone can or should do."

He watched her go walking down the road, then turned away

and went back to the house.

He got out the lawn mower and cut the grass. After the lawn was mowed, he puttered in the flowerbed. The zinnias were coming along fine, but something had gotten into the asters and they weren't doing well. And the grass kept creeping in, he thought. No matter what he did, the grass kept creeping into the bed to strangle out the plants.

After lunch, he thought, maybe I'll go fishing. Maybe going fishing will do me—

He caught the thought before he finished it.

He squatted by the flowerbed, dabbing at the ground with the point of his gardening trowel, and thought about the machine out in the pasture.

I want to think about it, he'd told Mary, but what was there to think about?

Something that someone had left in his pasture—a machine that clicked and laid a gift like an egg when you patted it.

What did that mean?

Why was it here?

Why did it click and hand out a gift when you patted it?

Response? The way a dog would wag its tail?

Gratitude? For being noticed by a human?

Negotiation?

Friendly gesture?

Booby trap?

And how had it known he would have sold his soul for a piece of jade one-half as fine as the piece it had given him?

How had it known a girl would like perfume?

He heard the running footsteps behind him and swung around and there was Mary, running across the lawn.

SHE reached him and went down on her knees beside him and her hands clutched his arm.

"Johnny found it, too," she panted. "I ran all the way. Johnny and that Smith boy found it. They cut across the pasture coming home from fishing..."

"Maybe we should have reported it," said Peter.

"It gave them something, too. A rod and reel to Johnny and a baseball bat and mitt to little Augie Smith."

"Oh, good Lord!"

"And now they're telling everyone."

"It doesn't matter," Peter said. "At least, I don't suppose it matters."

"What is that thing out there? You said you didn't know. But you have some idea. Peter, you must have some idea."

"I think it's alien," Peter reluctantly and embarrassedly told her. "It has a funny look about it, like nothing I've ever seen or read about, and Earth ma-

chines don't give away things when you lay a hand on them. You have to feed them coins first. This isn't—isn't from Earth."

"From Mars, you mean?"

"Not from Mars," said Peter. "Not from this solar system. We have no reason to think another race of high intelligence exists in this solar system and whoever dreamed up that machine had plenty of intelligence."

"But . . . not from this solar system . . ."

"From some other star."

"The stars are so far away!" she protested.

So far away, thought Peter. So far out of the reach of the human race. Within the reach of dreams, but not the reach of hands. So far away and so callous and uncaring. And the machine—

"Like a slot machine," he said, "except it always pays in jackpots and you don't even need a coin. That is crazy, Mary. That's one reason it isn't of this Earth. No Earth machine, no Earth inventor, would do that."

"The neighbors will be coming," Mary said.

"I know they will. They'll be coming for their handouts."

"But it isn't very big. It could not carry enough inside it for the entire neighborhood. It does not have much more than room enough for the gifts it's already handed out."

"Mary, did Johnny want a rod and reel?"

"He'd talked of practically nothing else."

"And you like perfume?"

"I'd never had any good perfume. Just cheap stuff." She laughed a little nervously. "And you? Do you like jade?"

"I'm what you might call a minor expert on it. It's a passion with me."

"Then that machine . . ."

"Gives each one the thing he wants," Peter finished for her.

"It's frightening," said Mary.

And it seemed strange that anything at all could be frightening on such a day as this—a burnished summer day, with white clouds rimming the western horizon and the sky the color of pale blue silk, a day that had no moods, but was as commonplace as the cornfield earth.

AFTER Mary had left, Peter went in the house and made his lunch. He sat by the window, eating it, and watched the neighbors come. They came by twos and threes, tramping across the pasture from all directions, coming to his pasture from their own farms, leaving the haying rigs and the cultivators, abandoning their work in the middle of the day to see the strange machine. They stood around and talked, tramping down the thicket where

he had found the machine, and at times their high, shrill voices drifted across to him, but he could not make out what they said, for the words were flattened and distorted by the distance.

From the stars, he'd said. From some place among the stars.

And if that be fantasy, he said, I have a right to it.

First contact, he thought.

And clever!

Let an alien being arrive on Earth and the women would run screaming for their homes and the men would grab their rifles and there'd be hell to pay.

But a machine—that was a different matter. What if it was a little different? What if it acted a little strangely? After all, it was only a machine. It was something that could be understood.

And if it handed out free gifts, that was all the better.

After lunch, he went out and sat on the steps and some of the neighbors came and showed him what the machine had given them. They sat around and talked, all of them excited and mystified, but not a single one of them was scared.

Among the gifts were wrist-watches and floor lamps, typewriters and fruit juicers, sets of dishes, chests of silver, bolts of drapery materials, shoes, shot-guns, carving sets, book ends, neckties, and many other items.

One youngster had a dozen skunk traps and another had a bicycle.

A modern Pandora's box, thought Peter, made by an alien intelligence and set down upon the Earth.

Apparently the word was spreading, for now the people came in cars. Some of them parked by the road and walked down to the pasture and others came into the barnyard and parked there, not bothering to ask for permission.

After a time, they would come back loaded with their loot and drive away. Out in the pasture was a milling throng of people. Peter, watching it, was reminded of a county fair or a village carnival.

BY chore-time, the last of them had gone, even the neighbors who had come to say a few words with him and to show him what they'd gotten, so he left the house and walked up the pasture slope.

The machine still was there and it was starting to build something. It had laid out around it a sort of platform of a stone that looked like marble, as if it were laying a foundation for a building. The foundation was about ten feet by twelve' and was set level against the pasture's slope, with footings of the same sort of stone going down into the ground.

He sat down on a stump a little distance away and looked out over the peace of the countryside. It seemed more beautiful, more quiet and peaceful than it had ever seemed before, and he sat there contentedly, letting the evening soak into his soul.

THE Sun had set not more than half an hour ago. The western sky was a delicate lemon fading into green, with here and there the pink of wandering cloud, while beneath the horizon the land lay in the haze of a blue twilight, deepening at the edges. The liquid evensong of birds ran along the hedges and the thickets and the whisper of swallows' wings came down from overhead.

This is Earth, he thought, the peaceful, human Earth, a landscape shaped by an agricultural people. This is the Earth of plum blossom and of proud red barns and of corn rows as straight as rifle barrels.

For millions of years, the Earth had lain thus, without interference; a land of soil and life, a local corner of the Galaxy engaged in its own small strivings.

And now?

Now, finally, there was interference.

Now, finally, someone or something had come into this local corner of the Galaxy and Earth was alone no longer.

To himself, he knew, it did not matter. Physically, there was no longer anything that possibly could matter to him. All that was left was the morning brightness and the evening peace and from each of these, from every hour of each day that was left to him, it was his purpose to extract the last bit of joy in being alive.

But to the others it would matter—to Mary Mallet and her brother Johnny, to the little Smith boy who had gotten the baseball bat and mitt, to all the people who had visited this pasture, and to all the millions who had not visited or even heard of it.

Here, in this lonely place in the midst of the great cornlands, had come, undramatically, a greater drama than the Earth had yet known. Here was the pivot point.

He said to the machine: "What do you intend with us?"

There was no answer.

He had not expected one.

He sat and watched the shadows deepen and the lights spring up in the farm houses that were sprinkled on the land. Dogs barked from far away and others answered them and the cowbells rang across the hills like tiny vesper notes.

At last, when he could see no longer, he walked slowly back to the house.

IN the kitchen, he found a lamp and lit it. He saw by the kitchen clock that it was almost nine o'clock—time for the evening news.

He went into the living room and turned on the radio. Sitting in the dark, he listened to it.

There was good news.

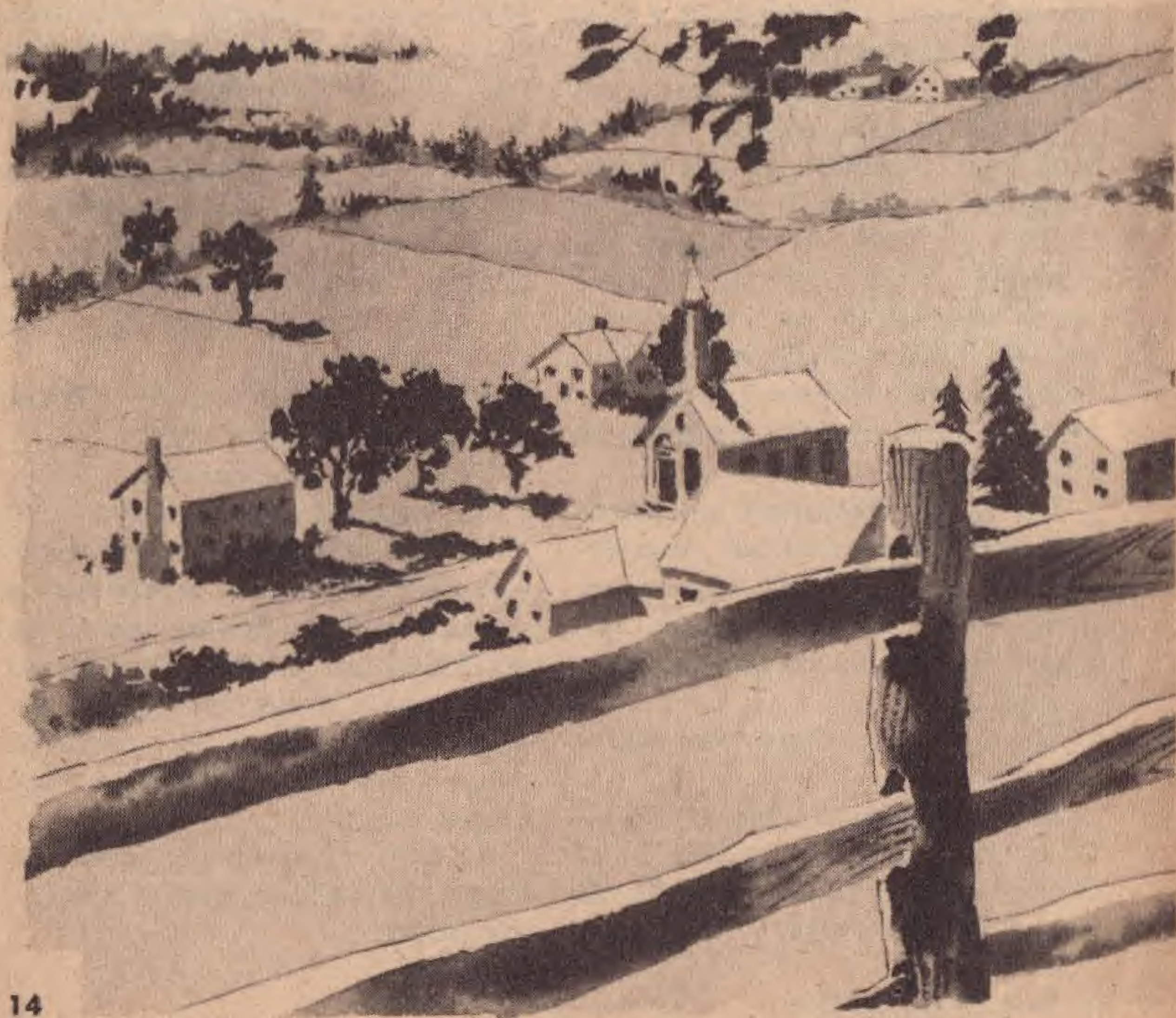
There had been no polio deaths in the state that day and only one new case had been reported.

"It is too soon to hope, of course," the newscaster said, "but it definitely is the first break in

the epidemic. Up to the time of broadcast, there have been no new cases for more than twenty hours. The state health director said . . ."

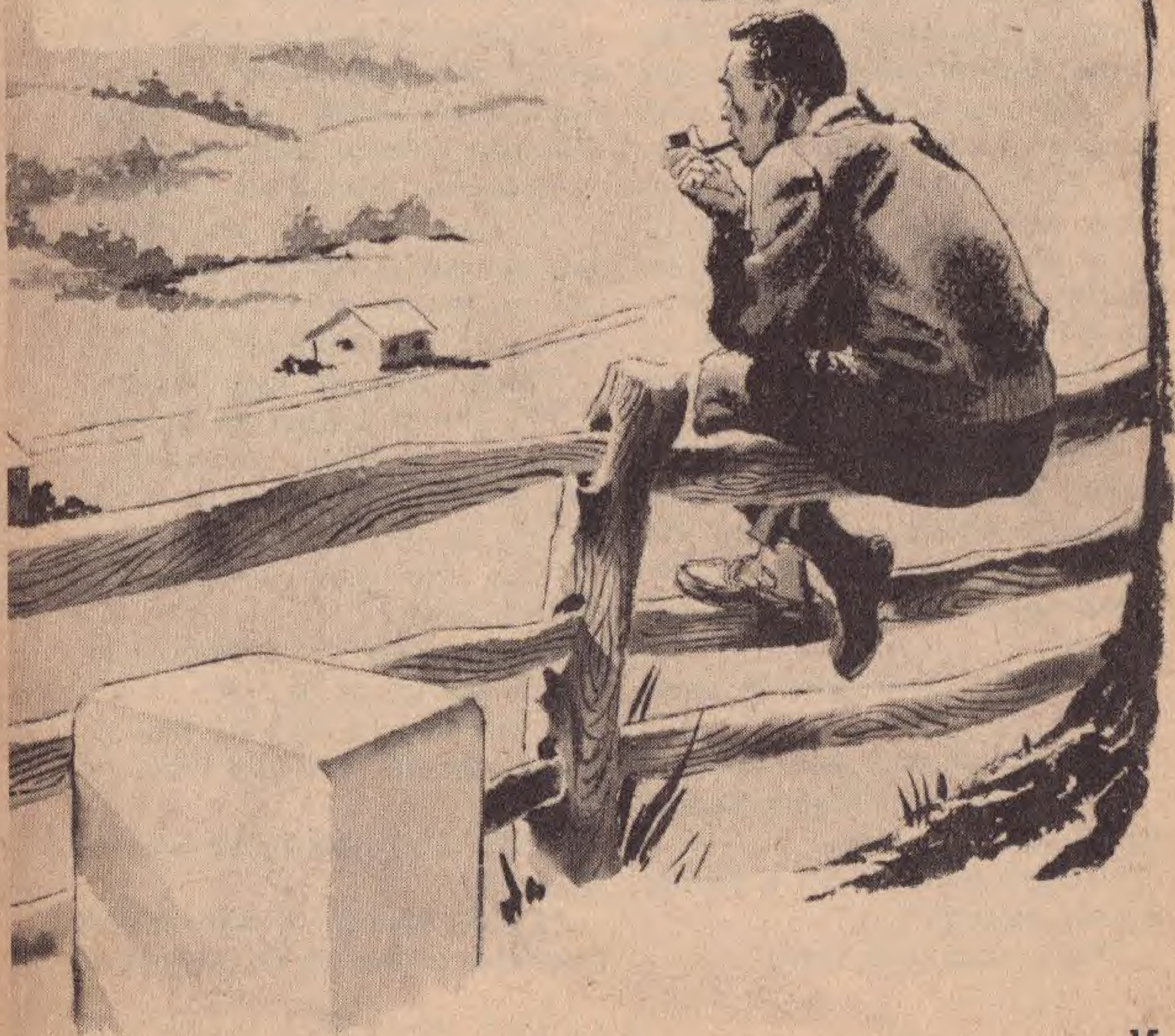
He went on to read what the health director said, which wasn't much of anything, just one of those public statements which pretty generally add up to nothing tangible.

It was the first day in almost three weeks, the newscaster had said, during which no polio deaths had been reported. But



despite the development, he said, there still was need of nurses. If you are a nurse, he added, won't you please call this number? You are badly needed.

He went on to warm over a grand jury report, without adding anything really new. He gave the weather broadcast. He said the



Emmett murder trial had been postponed another month.

Then he said: "Someone has just handed me a bulletin. Now let me see . . ."

You could hear the paper rustling as he held it to read it through, could hear him gasp a little.

"It says here," he said, "that Sheriff Joe Burns has just now been notified that a Flying Saucer has landed on the Peter Chaye farm out near Mallet Corners. No one seems to know too much about it. One report is that it was found this morning, but no one thought to notify the sheriff. Let me repeat—this is just a report. We don't know any more than what we've told you. We don't know if it is true or not. The sheriff is on his way there now. We'll let you know as soon as we learn anything. Keep tuned to this . . ."

Peter got up and turned off the radio. Then he went into the kitchen to bring in the lamp. He set the lamp on a table and sat down again to wait for Sheriff Burns.

He didn't have long to wait.

FOLKS tell me," said the sheriff, "this here Flying Saucer landed on your farm."

"I don't know if it's a Flying Saucer, Sheriff."

"Well, what is it, then?"

"I wouldn't know," said Peter.

"Folks tell me it was giving away things."

"It was doing that, all right."

"If this is some cockeyed advertising stunt," the sheriff said, "I'll have someone's neck for it."

"I'm sure it's not an advertising stunt."

"Why didn't you notify me right off? What you mean by holding out on a thing like this?"

"I didn't think of notifying you," Peter told him. "I wasn't trying to hold out on anything."

"You new around here, ain't you?" asked the sheriff. "I don't recollect seeing you before. Thought I knew everyone."

"I've been here three months."

"Folks tell me you ain't farming the place. Tell me you ain't got no family. Live here all by yourself, just doing nothing."

"That's correct," said Peter.

The sheriff waited for the explanation, but Peter offered none. The sheriff looked at him suspiciously in the smoky lamplight.

"Can you show us this here Flying Saucer?"

By now Peter was a little weary of the sheriff, so he said, "I can tell you how to find it. You go down past the barn and cross the brook . . ."

"Why don't you come with us, Chaye?"

"Look, Sheriff, I was telling you how to find it. Do you want

me to continue?"

"Why, sure," the sheriff said. "Of course I do. But why can't you . . ."

"I've seen it twice," said Peter. "I've been overrun by people all the afternoon."

"All right, all right," the sheriff said. "Tell me how to find it."

He told him and the sheriff left, followed by his two deputies.

The telephone rang.

Peter answered it. It was the radio station he'd been listening to.

"Say," asked the radio reporter, "you got a Saucer out there?"

"I don't think so," Peter said. "I do have something out here, though. The sheriff is going out to take a look at it."

"We want to send out our mobile TV unit, but we wanted to be sure there was something there. It be all right with you if we send it out?"

"No objections. Send it along."

"You sure you got something there?"

"I told you that I had."

"Well, then, suppose you tell me . . ."

Fifteen minutes later, he hung up.

The phone rang again.

IT was the Associated Press. The man at the other end of the wire was wary and skeptical.

"What's this I hear about a

Saucer out there?"

Ten minutes later, Peter hung up.

The phone rang almost immediately.

"McClelland of the Tribune," said a bored voice. "I heard a screwball story . . ."

Five minutes.

The phone rang again.

It was the United Press.

"Hear you got a Saucer. Any little men in it?"

Fifteen minutes.

The phone rang.

It was an irate citizen.

"I just heard on the radio you got a Flying Saucer. What kind of gag you trying to pull? You know there ain't any Flying Saucers . . ."

"Just a moment, sir," said Peter.

He let the receiver hang by its cord and went out to the kitchen. He found a pair of clips and came back. He could hear the irate citizen still chewing him out, the voice coming ghostlike out of the dangling receiver.

He went outside and found the wire and clipped it. When he came back in again, the receiver was silent. He hung it carefully on the hook.

Then he locked the doors and went to bed.

To bed, but not immediately to sleep. He lay beneath the covers, staring up into the darkness and

trying to quiet the turmoil of speculation that surged within his brain.

He had gone walking in the morning and found a machine. He had put his hand upon it and it had given him a gift. Later on, it had given other gifts.

"A machine came, bearing gifts," he said into the darkness.

A clever, calculated, well-worked-out first contact.

Contact them with something they will know and recognize and need not be afraid of, something to which they can feel superior.

Make it friendly—and what is more friendly than handing out a gift?

What is it?

Missionary?

Trader?

Diplomat?

Or just a mere machine and nothing more?

Spy? Adventurer? Investigator? Surveyor?

Doctor? Lawyer? Indian chief?

And why, of all places, had it landed here, in this forsaken farmland, in this pasture on his farm?

And its purpose?

WHAT had been the purpose, the almost inevitable motive, of those fictional alien beings who, in tales of fantasy, had landed on Earth?

To take over, of course. If

not by force, then by infiltration or by friendly persuasion and compulsion; to take over not only Earth, but the human race as well.

The man from the radio station had been excited, the Associated Press man had been indignant that anyone should so insult his intelligence, the Tribune man had been bored and the United Press man flippant. But the citizen had been angry. He was being taken in by another Flying Saucer story and it was just too much.

The citizen was angry because he didn't want his little world disturbed. He wanted no interference. He had trouble enough of his own without things being messed up by a Saucer's landing. He had problems of his own—earning a living, getting along with his neighbors, planning his work, worrying about the polio epidemic.

Although the newscaster had said the polio situation seemed a little brighter—no new cases and no deaths. And that was a fine thing, for polio was pain and death and a terror on the land.

Pain, he thought.

I've had no pain today.

For the first time in many days, there has been no pain.

He lay stiff and still beneath the covers, examining himself for pain. He knew just where it

lurked, the exact spot in his anatomy where it lurked hidden out of sight. He lay and waited for it, fearful, now that he had thought of it, that he would find it there.

But it was not there.

He lay and waited for it, afraid that the very thought of it would conjure it up from its hiding place. It did not come. He dared it to come, he invited it to show itself, he hurled mental jibes at it to lure it out. It refused to be lured.

He relaxed and knew that for the moment he was safe. But safe only temporarily, for the pain still was there. It bided its time, waited for its moment, would come when the time was right.

With careless abandon, trying to wipe out the future and its threat, he luxuriated in life without the pain. He listened to the house—the slightly settling joists that made the floor boards creak, the thrum of the light summer wind against the weathered siding, the scraping of the elm branch against the kitchen roof.

Another sound. A knocking at the door. "Chaye! Chaye, where are you?"

"Coming," he called.

HE found slippers and went to the door. It was the sheriff and his men.

"Light the lamp," the sheriff said.

"You got a match?" Peter asked.

"Yeah, here are some."

Groping in the dark, Peter found the sheriff's hand and the book of matches.

He located the table, slid his hand across the top and felt the lamp. He lit it and looked at the sheriff from across the table.

"Chaye," the sheriff said, "that thing is building something."

"I know it is."

"What's the gag?"

"There's no gag."

"It gave me this," the sheriff said.

He threw the object on the table.

"A gun," said Peter.

"You ever see one like it?"

It was a gun, all right, about the size of a .45. But it had no trigger and the muzzle flared and the whole thing was made of some white, translucent substance.

Peter picked it up and found it weighed no more than half a pound or so.

"No," said Peter. "No, I've never seen one like it." He put it back on the table, gingerly. "Does it work?"

"It does," the sheriff said. "I tried it on your barn."

"There ain't no barn no more," said one of the deputies.

"No report, no flash, no nothing," the sheriff added.

"Just no barn," repeated the deputy, obsessed with the idea.

A car drove into the yard.

"Go out and see who's there," said the sheriff.

One of the deputies went out.

"I don't get it," complained the sheriff. "They said Flying Saucer, but I don't think it's any Saucer. A box is all it is."

"It's a machine," said Peter.

Feet stamped across the porch and men came through the door.

"Newspapermen," said the deputy who had gone out to see.

"I ain't got no statement, boys," the sheriff said.

One of them said to Peter: "You Chaye?"

Peter nodded.

"I'm Hoskins from the Tribune. This is Johnson from the AP. That guy over there with the sappy look is a photographer, name of Langly. Disregard him."

He pounded Peter on the back. "How does it feel to be sitting in the middle of the century's biggest news break? Great stuff, hey, boy?"

Langly said: "Hold it."

A flash bulb popped.

"I got to use the phone," said Johnson. "Where is it?"

"Over there," said Peter. "It's not working."

"How come at a time like this?"

"I cut the wire."

"Cut the wire! You crazy, Chaye?"

"There were too many people calling."

"Now," said Hoskins, "wasn't that a hell of a thing to do?"

"I'll fix her up," Langly offered. "Anyone got a pair of pliers?"

THE sheriff said, "You boys hold on a minute."

"Hurry up and get into a pair of pants," Hoskins said to Peter. "We'll want your picture on the scene. Standing with your foot on it, like the guy that's just killed an elephant."

"You listen here," the sheriff said.

"What is it, Sheriff?"

"This here's important. Get it straight. You guys can't go messing around with it."

"Sure it's important," said Hoskins. "That is why we're here. Millions of people standing around with their tongues hanging out for news."

"Here are some pliers," someone remarked.

"Leave me at that phone," said Langly.

"What are we horsing around for?" asked Hoskins. "Let's go out and see it."

"I gotta make a call," said Johnson.

"Look here, boys," the sheriff insisted in confusion. "Wait—"

"What's it like, Sheriff? Figure it's a Saucer? How big is it? Does it make a clicking noise or something? Hey, Langly, take the sheriff's picture."

"Just a minute," Langly shouted from outside. "I'm fixing up this wire."

More feet came across the porch. A head was thrust into the door.

"TV truck," the head said. "This the place? How do we get out to the thing?"

The phone rang.

Johnson answered it.

"It's for you, Sheriff."

The sheriff lumbered across the room. They waited, listening.

"Sure, this is Sheriff Burns . . . Yeah, it's out there, all right . . . Sure, I know. I've seen it . . . No, of course, I don't know what it is . . . Yes, I understand . . . Yes, sir. . . . Yes, sir. I'll see to it, sir."

He hung up the receiver and turned around to face them.

"That was military intelligence," he said. "No one is going out there. No one's moving from this house. This place is restricted as of this minute."

He looked from one to another of them ferociously.

"Them's orders," he told them.

"Oh, hell," said Hoskins.

"I came all the way out here," bawled the TV man. "I'm not going to come out here and not . . ."

"It isn't me that's doing the ordering," said the sheriff. "It's Uncle Sam. You boys take things easy."

Peter went out into the kitchen and poked up the fire and set on the kettle.

"The coffee's there," he said to Langly. "I'll put on some clothes."

SLOWLY, the night wore on. Hoskins and Johnson phoned in the information they had jotted down on folded copy paper, their pencils stabbing cryptic signs as they talked to Peter and the sheriff. After some argument with the sheriff about letting him go, Langly left with his pictures. The sheriff paced up and down the room.

The radio blared. The phone banged constantly.

They drank coffee and smoked cigarettes, littering the floor with ground-out stubs. More newsmen pulled in, were duly warned by the sheriff, and settled down to wait.

Someone brought out a bottle and passed it around. Someone else tried to start a poker game, but nobody was interested.

Peter went out to get an armload of wood. The night was quiet, with stars.

He glanced toward the pasture, but there was nothing there to see. He tried to make out the empty place where the barn had dis-

appeared. It was too dark to tell whether the barn was there or not.

Death watch or the last dark hour before the dawn—the brightest, most wonderful dawn that Man had ever seen in all his years of striving?

The machine was building something out there, building something in the night.

And what was it building?

Shrine?

Trading post?

Mission house?

Embassy?

Fort?

There was no way of knowing, no way that one could tell.

Whatever it was building, it was the first known outpost ever built by an alien race on the planet Earth.

He went back into the house with the load of wood.

"They're sending troops," the sheriff told him.

"Tramp, tramp, tramp," said Hoskins, dead-pan, cigarette hanging negligently to his underlip.

"The radio just said so," the sheriff said. "They called out the guard."

Hoskins and Johnson did some more tramp-tramping.

"You guys better not horse around with them soldier boys," the sheriff warned. "They'll shove a bayonet . . ."

Hoskins made a noise like a bugle blowing the charge. Johnson grabbed two spoons and beat out galloping hoofs.

"The calvary!" shouted Hoskins. "By God, boys, we're saved!"

Someone said wearily: "Can't you guys be your age?"

They sat around, as the night wore on, drinking coffee and smoking. They didn't do much talking.

The radio station finally signed off. Someone fooled around, trying to get another station, but the batteries were too weak to pull in anything. He shut the radio off. It had been some time now since the phone had rung.

DAWN was still an hour away when the guardsmen arrived, not marching, nor riding horses, but in five canvas-covered trucks.

The captain came in for just a moment to find out where this goddam obscenity Saucer was. He was the fidgety type. He wouldn't even stay for a cup of coffee. He went out yelling orders at the drivers.

Inside the house, the others waited and heard the five trucks growl away.

Dawn came and a building stood in the pasture, and it was a bit confusing, for you could see that it was being built in a way that was highly unorthodox.

Whoever or whatever was building it had started on the inside and was building outward, so that you saw the core of the building, as if it were a building that was being torn down and some one already had ripped off the entire exterior.

It covered half an acre and was five stories high. It gleamed pink in the first light of the morning, a beautiful misty pink that made you choke up a little, remembering the color of the dress the little girl next door had worn for her seventh birthday party.

The guardsmen were ringed around it, the morning light spattering off their bayonets as they stood the guard.

Peter made breakfast—huge stacks of flapjacks, all the bacon he had left, every egg he could find, a gallon or two of oatmeal, more coffee.

"We'll send out and get some grub," said Hoskins. "We'll make this right with you."

After breakfast, the sheriff and the deputies drove back to the county seat. Hoskins took up a collection and went to town to buy groceries. The other newsmen stayed on. The TV truck got squared off for some wide-angle distance shots.

The telephone started jangling again. The newsmen took turns answering it.

Peter walked down the road

to the Mallet farm to get eggs and milk.

Mary ran out to the gate to meet him. "The neighbors are getting scared," she said.

"They weren't scared yesterday," said Peter. "They walked right up and got their gifts."

"But this is different, Peter. This is getting out of hand. The building . . ."

And that was it, of course. The building.

No one had been frightened of an innocent-appearing machine because it was small and friendly. It shone so prettily and it clicked so nicely and it handed out gifts. It was something that could be superficially recognized and it had a purpose that was understandable if one didn't look too far.

But the building was big and might get bigger still and it was being erected inside out. And who in all the world had ever seen a structure built as fast as that one—five stories in one single night?

"**H**OW do they do it, Peter?" Mary asked in a hushed little voice.

"I don't know," he said. "Some principle that is entirely alien to us, some process that men have never even thought of, a way of doing things, perhaps, that starts on an entirely different premise than the human way."

"But it's just the kind of building that men themselves would build," she objected. "Not that kind of stone, perhaps—maybe there isn't any stone like that in the entire world—but in every other way there's nothing strange about it. It looks like a big high school or a department store."

"My jade was jade," said Peter, "and your perfume was perfume and the rod and reel that Johnny got was a regular rod and reel."

"That means they know about us. They know all there is to know. Peter, they've been watching us!"

"I have no doubt of it."

He saw the terror in her eyes and reached out a hand to draw her close and she came into his arms and he held her tightly and thought, even as he did so, how strange that he should be the one to extend comfort and assurance.

"I'm foolish, Peter."

"You're wonderful," he assured her.

"I'm not really scared."

"Of course you're not." He wanted to say, "I love you," but he knew that those were words he could never say. Although the pain, he thought—the pain had not come this morning.

"I'll get the milk and eggs," said Mary.

"Give me all you can spare. I have quite a crowd to feed."

Walking back, he thought about the neighbors being frightened now and wondered how long it would be before the world got frightened, too—how long before artillery would be wheeling into line, how long before an atom bomb would fall.

He stopped on the rise of the hill above the house and for the first time noticed that the barn was gone. It had been sheared off as cleanly as if cut with a knife, with the stump of the foundation sliced away at an angle.

He wondered if the sheriff still had the gun and supposed he had. And he wondered what the sheriff would do with it and why it had been given him. For, of all the gifts that he had seen, it was the only one that was not familiar to Earth.

In the pasture that had been empty yesterday, that had been only trees and grass and old, grassed-over ditches, bordered by the wild plum thickets and the hazel brush and blackberry vine, rose the building. It seemed to him that it was bigger than when he had seen it less than an hour before.

BACK at the house, the newspapermen were sitting in the yard, looking at the building.

One of them said to him, "The brass arrived. They're waiting in there for you."

"Intelligence?" asked Peter.

The newsman nodded. "A chicken colonel and a major."

They were waiting in the living room. The colonel was a young man with gray hair. The major wore a mustache, very military.

The colonel introduced himself. "I'm Colonel Whitman. This is Major Rockwell."

Peter put down his eggs and milk and nodded acknowledgment.

"You found this machine," said the colonel.

"That is right."

"Tell us about it," said the colonel, so Peter told them about it.

"This jade," the colonel said. "Could we have a look at it?"

Peter went to the kitchen and got the jade. They passed it from one to the other, examining it closely, turning it over and over in their hands, a bit suspicious of it, but admiring it, although Peter could see they knew nothing about jade.

Almost as if he might have known what was in Peter's mind, the colonel lifted his eyes from the jade and looked at him.

"You know jade," the colonel said.

"Very well," said Peter.

"You've worked with it before?"

"In a museum."

"Tell me about yourself."

Peter hesitated — then told about himself.

"But why are you here?" the colonel asked.

"Have you ever been in a hospital, Colonel? Have you ever thought what it would be like to die there?"

The colonel nodded. "I can see your point. But here you'll have no—"

"I won't wait that long."

"Yes, yes," the colonel said. "I see."

"Colonel," said the major. "Look at this, sir, if you will. This symbolism is the same . . ."

The colonel snatched it from his hands and looked.

"The same as on the letter-head!" he shouted.

The colonel lifted his head and stared at Peter, as if it had been the first time he had seen him, as if he were surprised at seeing him.

There was, suddenly, a gun in the major's hand, pointing at Peter, its muzzle a cold and steady eye.

Peter tried to throw himself aside.

He was too late.

The major shot him down.

PETER fell for a million years through a wool-gray nothingness that screamed and he knew it must be a dream, an endless atavistic dream of falling,

brought down through all the years from incredibly remote forebears who had dwelt in trees and had lived in fear of falling. He tried to pinch himself to awaken from the dream, but he couldn't do it, since he had no hands to pinch with, and, after a time, it became apparent that he had no body to pinch. He was a disembodied consciousness hurtling through a gulf which seemed to have no boundaries.

He fell for a million years through the void that seemed to scream at him. At first the screaming soaked into him and filled his soul, since he had no body, with a terrible agony that went on and on, never quite reaching the breaking point that would send him into the release of insanity. But he got used to it after a time and as soon as he did, the screaming stopped and he plunged down through space in a silence that was more dreadful than the screaming.

He fell forever and forever and then it seemed that forever ended, for he was at rest and no longer falling.

He saw a face. It was a face from incredibly long ago, a face that he once had seen and had long forgotten, and he searched back along his memory to try to identify it.

He couldn't see it too clearly, for it seemed to keep bobbing

around so he couldn't pin it down. He tried and tried and couldn't and he closed his eyes to shut the face away.

"Chaye," a voice said. "Peter Chaye."

"Go away," said Peter.

The voice went away.

He opened his eyes again and the face was there, clearer now and no longer bobbing.

It was the colonel's face.

HE shut his eyes again, remembering the steady eye of the gun the major had held. He'd jumped aside, or tried to, and he had been too slow. Something had happened and he'd fallen for a million years and here he was, with the colonel looking at him.

He'd been shot. That was the answer, of course. The major had shot him and he was in a hospital. But where had he been hit? Arm? Both arms seemed to be all right. Leg? Both legs were all right, too. No pain. No bandages. No casts.

The colonel said: "He came to for just a minute, Doc, and now he's off again."

"He'll be all right," said Doc. "Just give him time. You gave him too big a charge, that's all. It'll take a little time."

"We must talk to him."

"You'll have to wait."

There was silence for a moment.

Then: "You're absolutely sure he's human?"

"We've gone over every inch of him," said Doc. "If he isn't human, he's too good an imitation for us ever to find out."

"He told me he had cancer," the colonel said. "Claimed he was dying of cancer. Don't you see, if he wasn't human, if there was something wrong, he could always try to make it look . . ."

"He hasn't any cancer. Not a sign of it. No sign he ever had it. No sign he ever will."

EVEN with his eyes shut, Peter felt that he was agape with disbelief and amazement. He forced his eyes to stay closed, afraid that this was a trick.

"That other doctor," the colonel said, "told Peter Chaye four months ago he had six more months to live. He told him . . ."

Doc said, "Colonel, I won't even try to explain it. All I can tell you is that the man lying on that bed hasn't got cancer. He's as healthy a man as you would wish to find."

"It isn't Peter Chaye, then," the colonel stated in a dogged voice. "It's something that took over Peter Chaye or duplicated Peter Chaye or . . ."

Doc said, "Now, now, Colonel. Let's stick to what we know."

"You're sure he's a man, Doc?"

"I'm sure he's a human being,

if that is what you mean."

"No little differences? Just one seemingly unimportant deviation from the human norm?"

"None," Doc said, "and even if there were, it wouldn't prove what you are after. There could be minor mutational difference in anyone. The human body doesn't always run according to a blueprint."

"There were differences in all that stuff the machine gave away. Little differences that came to light only on close examination—but differences that spelled out a margin between human and alien manufacture."

"All right, then, so there were differences. So those things were made by aliens. I still tell you this man is a human being."

"It all ties in so neatly," the colonel declared. "Chaye goes out and buys this place—this old, abandoned farm. He's eccentric as hell by the standards of that neighborhood. By the very fact of his eccentricity, he invites attention, which might be undesirable, but at the same time his eccentricity might be used to cover up and smooth over anything he did out of the ordinary. It would be just somebody like him who'd supposedly find a strange machine. It would be . . ."

"You're building up a case," said Doc, "without anything to go on. You asked for one little

difference in him to base your cockeyed theory on—no offense, but that's how I, as a doctor, see it. Well, now let's have one little fact—fact, mind you, not guess—to support this idea of yours.”

“What was in that barn?” demanded the colonel. “That's what I want to know. Did Chaye build that machine in there? Was that why it was destroyed?”

“The sheriff destroyed the barn,” the doctor said. “Chaye had nothing to do with it.”

“But who gave the gun to the sheriff? Chaye's machine, that's who. And it would be an easy matter of suggestion, mind control, hypnotism, whatever you want to call it . . .”

“Let's get back to facts. You used an anesthetic gun on this man. You've held him prisoner. By your orders, he has been subjected to intensive examination, a clear invasion of his privacy. I hope to God he never brings you into court. He could throw the book at you.”

“I know,” the colonel admitted reluctantly. “But we have to bust this thing. We must find out what it is. We have got to get that bomb back!”

“The bomb's what worries you.”

“Hanging up there,” the colonel said, sounding as if he'd shuddered. “Just hanging up there!”

“I have to get along,” replied the doctor. “Take it easy, Colonel.”

THE doctor's footsteps went out the door and down the corridor, fading away. The colonel paced up and down a while and then sat down heavily in a chair.

Peter lay in bed, and one thought crashed through his brain, one thought again and again:

I'm going to live!

But he hadn't been.

He had been ready for the day when the pain finally became too great to bear.

He had picked his ground to spend his final days, to make his final stand.

And now he had been reprieved. Now, somehow, he had been given back his life.

He lay in the bed, fighting against excitement, against a growing tenseness, trying to maintain the pretense that he still was under the influence of whatever he'd been shot with.

An anesthetic gun, the doctor had said. Something new, something he had never heard of. And yet somewhere there was a hint of it. Something, he remembered, about dentistry—a new technique that dentists used to desensitize the gums, a fine stream of anesthetic sprayed against the

gums. Something like that, only hundreds or thousands of times stronger?

Shot and brought here and examined because of some wild fantasy lurking in the mind of a G-2 colonel.

Fantasy? He wondered. Unwitting, unsuspecting, could he have played a part? It was ridiculous, of course. For he remembered nothing he had done or said or even thought which gave him a clue to any part he might have played in the machine's coming to the Earth.

Could cancer be something other than disease? Some uninvited guest, perhaps, that came and lived within a human body? A clever alien guest who came from far away, across the unguessed light-years?

And that, he knew, was fantasy to match the colonel's fantasy, a malignant nightmare of distrust that dwelt within the human mind, an instinctive defense mechanism that conditioned the race to expect the worst and to arm against it.

There was nothing feared so much as the unknown factor, nothing which one must guard against so much as the unexplained.

We have to bust this thing, the colonel had said. We must find out what it is.

And, that, of course, was the

terror of it—that they had no way of knowing what it was.

HE stirred at last, very deliberately, and the colonel spoke.

"Peter Chaye," he said.

"Yes, what is it, Colonel?"

"I have to talk to you."

"All right, talk to me."

He sat up in the bed and saw that he was in a hospital room. It had the stark, antiseptic quality, the tile floor, the colorless walls, the utilitarian look—and the bed on which he lay was a hospital bed.

"How do you feel?" the colonel asked.

"Not so hot," confessed Peter.

"We were a little rough on you, but we couldn't take a chance. There was the letter, you see, and the slot machines and the stamp machines and all the other things and . . ."

"You said something about a letterhead."

"What do you know about that, Chaye?"

"I don't know a thing."

"It came to the President," said the colonel. "A month or so ago. And a similar one went to every other administrative head on the entire Earth."

"Saying?"

"That's the hell of it. It was written in no language known anywhere on Earth. But there



was one line—one line on all the letters—that you could read. It said: 'By the time you have this deciphered, you'll be ready to act logically.' And that was all anybody could read—one line in the native language of every country that got a copy of the letter. The rest was in gibberish, for all we could make of it."

"You haven't deciphered it?"

He could see the colonel sweating. "Not even a single character, much less a word."

Peter reached out a hand to the bedside table and lifted the carafe, tipped it above the glass. There was nothing in it.



The colonel heaved himself out of his chair. "I'll get you a drink of water."

He picked up the glass and opened the bathroom door.

"I'll let it run a while and get it cold," he said.

But Peter scarcely heard him, for he was staring at the door. There was a bolt on it and if—

The water started running and the colonel raised his voice to be heard above it.

"That's about the time we started finding the machines," he said. "Can you imagine it? A cigarette-vending machine and you could buy cigarettes from it,

but it was more than that. It was something watching you. Something that studied the people and the way they lived. And the stamp machines and the slot machines and all the other mechanical contrivances that we have set up. Not machines, but watchers. Watching all the time. Watching and learning . . ."

PETER swung his legs out of bed and touched the floor. He approached swiftly and silently on bare feet and slammed the door, then reached up and slid the bolt. It snicked neatly into place.

"Hey!" the colonel shouted.

Clothes?

They might be in the closet.

Peter leaped at it and wrenched the door open and there they were, hung upon the hangers.

He ripped off the hospital gown, snatched at his trousers and pulled them on.

Shirt, now! In a drawer.

And shoes? There on the closet floor. Don't take time to tie them.

The colonel was pushing and hammering at the door, not yelling yet. Later he would, but right now he was intent on saving all the face he could. He wouldn't want to advertise immediately the fact that he'd been tricked.

Peter felt through his pockets. His wallet was gone. So was everything else—his knife, his

watch, his keys. More than likely they'd taken all of it and put it in the office safe when he'd been brought in.

No time to worry about any of them. The thing now was to get away.

He went out the door and down the corridor, carefully not going too fast. He passed a nurse, but she scarcely glanced at him.

He found a stairway door and opened it. Now he could hurry just a little more. He went down the stairs three at a time, shoelaces clattering.

The stairs, he told himself, were fairly safe. Almost no one would use them when there were the elevators. He stopped and bent over for a moment and tied the laces.

The floor numbers were painted above each of the doors, so he knew where he was. At the ground floor, he entered the corridor again. So far, there seemed to be no alarms, although any minute now the colonel would start to raise a ruckus.

Would they try to stop him at the door? Would there be someone to question him? Would—

A basket of flowers stood beside a door. He glanced up and down the corridor. There were several people, but they weren't looking at him. He scooped up the flowers.

At the door, he said to the at-

tendant who sat behind the desk: "Mistake. Wrong flowers."

She smiled sourly, but made no move to stop him.

Outside, he put the flowers down on the steps and walked rapidly away.

An hour later, he knew that he was safe. He knew also that he was in a city thirty miles away from where he wanted to go and that he had no money and that he was hungry and his feet were sore from walking on the hard and unyielding concrete of the sidewalks.

He found a park and sat down on a bench. A little distance away, a group of old men were playing checkers at a table. A mother wheeled her baby. A young man sat on a nearby bench, listening to a tiny radio.

THE radio said: "... apparently the building is completed. There has been no sign of it growing for the last eighteen hours. At the moment, it measures a thousand stories high and covers more than a hundred acres. The bomb, which was dropped two days ago, still floats there above it, held in suspension by some strange force. Artillery is standing by, waiting for the word to fire, but the word has not come through. Many think that since the bomb could not get through, shells will have no

better chance, if any at all.

"A military spokesman, in fact, has said that the big guns are mere precautionary measures, which may be all right, but it certainly doesn't explain why the bomb was dropped. There is a rising clamor, not only in Congress, but throughout the world, to determine why an attempt was made at bombing. There has as yet been no hostile move directed from the building. The only damage so far reported has been the engulfment by the building of the farm home of Peter Chaye, the man who found the machine.

"All trace has been lost of Chaye since three days ago, when he suffered an attack of some sort and was taken from his home. It is believed that he may be in military custody. There is wide speculation on what Chaye may or may not know. It is entirely likely that he is the only man on Earth who can shed any light on what has happened on his farm.

"Meanwhile, the military guard has been tightened around the scene and a corridor of some eighteen miles in depth around it has been evacuated. It is known that two delegations of scientists have been escorted through the lines. While no official announcement has been made, there is good reason to believe they learned little from their visits.

What the building is, who or what has engineered its construction, if you can call the inside-out process by which it grew construction, or what may be expected next are all fields of groundless speculation. There is plenty of that, naturally, but no one has yet come up with what might be called an explanation.

"The world's press wires are continuing to pile up reams of copy, but even so there is little actual, concrete knowledge—few facts that can be listed one, two, three right down the line.

"There is little other news of any sort and perhaps it's just as well, since there is no room at the moment in the public interest for anything else but this mysterious building. Strangely, however, there is little other news. As so often happens when big news breaks, all other events seem to wait for some other time to happen. The polio epidemic is rapidly subsiding; there is no major crime news. In the world's capitals, of course, all legislative action is at a complete standstill, with the governments watching closely the developments at the building.

"There is a rising feeling at many of these capitals that the building is not of mere national concern, that decisions regarding it must be made at an international level. The attempted

bombing has resulted in some argument that we, as the nation most concerned, cannot be trusted to act in a calm, dispassionate way, and that an objective world viewpoint is necessary for an intelligent handling of the situation."

PETER got up from his bench and walked away. He'd been taken from his home three days ago, the radio had said. No wonder he was starved.

Three days—and in that time the building had grown a thousand stories high and now covered a hundred acres.

He went along, not hurrying too much now, his feet a heavy ache, his belly pinched with hunger.

He had to get back to the building—somehow he had to get back there. It was a sudden need, realized and admitted now, but the reason for it, the source of it, was not yet apparent. It was as if there had been something he had left behind and he had to go and find it. Something I left behind, he thought. What could he have left behind? Nothing but the pain and the knowledge that he walked with a dark companion and the little capsule that he carried in his pocket for the time when the pain grew too great.

He felt in his pocket and the capsule was no longer there. It

had disappeared along with his wallet and his pocket knife and watch. No matter now, he thought. I no longer need the capsule.

He heard the hurrying footsteps behind him and there was an urgency about them that made him swing around.

"Peter!" Mary cried out. "Peter, I thought I recognized you. I was hurrying to catch you."

He stood and looked at her as if he did not quite believe it was she whom he saw.

"Where have you been?" she asked.

"Hospital," Peter said. "I ran away from them. But you . . ."

"We were evacuated, Peter. They came and told us that we had to leave. Some of us are at a camp down at the other end of the park. Pa is carrying on something awful and I can't blame him—having to leave right in the middle of haying and with the small grain almost ready to be cut."

She tilted back her head and looked into his face.

"You look all worn out," she said. "Is it worse again?"

"It?" he asked, then realized that the neighbors must have known—that the reason for his coming to the farm must have been general knowledge, for there were no such things as secrets in

a farming neighborhood.

"I'm sorry, Peter," Mary said. "Terribly sorry. I shouldn't have . . ."

"It's all right," said Peter. "Because it's gone now, Mary. I haven't got it any more. I don't know how or why, but I've gotten rid of it in some way."

"The hospital?" she suggested.

"The hospital had nothing to do with it. It had cleared up before I went there. They just found out at the hospital, that is all."

"Maybe the diagnosis was wrong."

He shook his head. "It wasn't wrong, Mary."

STILL, how could he be sure? How could he, or the medical world, say positively that it had been malignant cells and not something else—some strange parasite to which he had played the unsuspecting host?

"You said you ran away," she reminded him.

"They'll be looking for me, Mary. The colonel and the major. They think I had something to do with the machine I found. They think I might have made it. They took me to the hospital to find out if I was human."

"Of all the silly things!"

"I've got to get back to the farm," he said. "I simply have to get back there."

"You can't," she told him. "There are soldiers everywhere."

"I'll crawl on my belly in the ditches, if I have to. Travel at night. Sneak through the lines. Fight if I'm discovered and they try to prevent me. There is no alternative. I have to make a try."

"You're ill," she said, anxiously staring at his face.

He grinned at her. "Not ill. Just hungry."

"Come on then." She took his arm.

He held back. "Not to the camp. I can't have someone seeing me. In just a little while, I'll be a hunted man—if I'm not one already."

"A restaurant, of course."

"They took my wallet, Mary. I haven't any money."

"I have shopping money."

"No," he said. "I'll get along. There's nothing that can beat me now."

"You really mean that, don't you?"

"It just occurred to me," Peter admitted, confused and yet somehow sure that what he had said was not reckless bravado, but a blunt fact.

"You're going back?"

"I have to, Mary."

"And you think you have a chance?"

He nodded.

"Peter," she began hesitantly.

"Yes?"

"How much bother would I be?"

"You? How do you mean? A bother in what way?"

"If I went along."

"But you can't. There's no reason for you to."

She lifted her chin just a little. "There is a reason, Peter. Almost as if I were being called there. Like a bell ringing in my head—a school bell calling in the children . . ."

"Mary," he said, "that perfume bottle—there was a certain symbol on it, wasn't there?"

"Carved in the glass," she told him. "The same symbol, Peter, that was carved into the jade."

And the same symbol, he thought, that had been on the letterheads.

"Come on," he decided suddenly. "You won't be any bother."

"We'll eat first," she said. "We can use the shopping money."

THEY walked down the path, hand in hand, like two teenage sweethearts.

"We have lots of time," said Peter. "We can't start for home till dark."

They ate at a small restaurant on an obscure street and after that went grocery shopping. They bought a loaf of bread and two rings of bologna and a slab of cheese, which took all of Mary's

money, and for the change the grocer sold them an empty bottle in which to carry water. It would serve as a canteen.

They walked to the edge of the city and out through the suburbs and into the open country, not traveling fast, for there was no point in trying to go too far before night set in.

They found a stream and sat beside it, for all the world like a couple on a picnic. Mary took off her shoes and dabbled her feet in the water and the two of them felt disproportionately happy.

Night came and they started out. There was no Moon, but the sky was ablaze with stars. Although they took some tumbles and at other times wondered where they were, they kept moving on, staying off the roads, walking through the fields and pastures, skirting the farm houses to avoid barking dogs.

It was shortly after midnight that they saw the first of the campfires and swung wide around them. From the top of a ridge, they looked down upon the camp and saw the outlines of tents and the dull shapes of the canvas-covered trucks. And, later on, they almost stumbled into an artillery outfit, but got safely away without encountering the sentries who were certain to be stationed around the perimeter of the bivouac.

Now they knew that they were inside the evacuated area, that they were moving through the outer ring of soldiers and guns which hemmed in the building.

They moved more cautiously and made slower time. When the first false light of dawn came into the east, they holed up in a dense plum thicket in the corner of a pasture.

"I'm tired," sighed Mary. "I wasn't tired all night or, if I was, I didn't know it—but now that we've stopped, I feel exhausted."

"We'll eat and sleep," Peter said.

"Sleep comes first. I'm too tired to eat."

Peter left her and crawled through the thicket to its edge.

IN the growing light of morning stood the Building, a great blue-misted mass that reared above the horizon like a blunted finger pointing at the sky.

"Mary!" Peter whispered. "Mary, there it is!"

He heard her crawling through the thicket to his side.

"Peter, it's a long way off."

"Yes, I know it is. But we are going there."

They crouched there watching it.

"I can't see the bomb," said Mary. "The bomb that's hanging over it."

"It's too far off to see."

"Why is it us? Why are we the ones who are going back? Why are we the only ones who are not afraid?"

"I don't know," said Peter, frowning puzzledly. "No actual reason, that is. I'm going back because I want to—no, because I have to. You see, it was the place I chose. The dying place. Like the elephants crawling off to die where all other elephants die."

"But you're all right now, Peter."

"That makes no difference—or it doesn't seem to. It was where I found peace and an understanding."

"And there were the symbols, Peter. The symbols on the bottle and the jade."

"Let's go back," he said. "Someone will spot us here."

"Our gifts were the only ones that had the symbols," Mary persisted. "None of the others had any of them. I asked around. There were no symbols at all on the other gifts."

"There's no time to wonder about that. Come on."

They crawled back to the center of the thicket.

The Sun had risen above the horizon now and sent level shafts of light into the thicket and the early morning silence hung over them like a benediction.

"Peter," said Mary, "I just can't stay awake any longer. Kiss me before I go to sleep."

He kissed her and they clung together, shut from the world by the jagged, twisted, low-growing branches of the plum trees.

"I hear the bells," she breathed. "Do you hear them, too?"

Peter shook his head.

"Like school bells," she said. "Like bells on the first day of school—the first day you ever went."

"You're tired," he told her.

"I've heard them before. This is not the first time."

He kissed her again. "Go to sleep," he said and she did, almost as soon as she lay down and closed her eyes.

He sat quietly beside her and his mind retreated to his own hidden depths, searching for the pain within him. But there was no pain. It was gone forever.

The pain was gone and the incidence of polio was down and it was a crazy thing to think, but he thought it, anyhow:

Missionary!

WHEN human missionaries went out to heathen lands, what were the first things that they did?

They preached, of course, but there were other things as well. They fought disease and they worked for sanitation and labored

to improve the welfare of the people and tried to educate them to a better way of life. And in this way they not only carried out their religious precepts, but gained the confidence of the heathen folk as well.

And if an alien missionary came to Earth, what would be among the first things that he was sure to do? Would it not be reasonable that he, too, would fight disease and try to improve the welfare of his chosen charges? Thus he would gain their confidence. Although he could not expect to gain too much at first. He could expect hostility and suspicion. Only a pitiful handful would not resent him or be afraid of him.

And if the missionary—

And if **THIS** missionary—

Peter fell asleep.

The roar awakened him and he sat upright, sleep entirely wiped from his mind.

The roar still was there, somewhere outside the thicket, but it was receding.

"Peter! Peter!"

"Quiet, Mary! There is something out there!"

The roar turned around and came back again, growing until it was the sound of clanking thunder and the Earth shook with the sound. It receded again.

The midday sunlight came down through the branches and

made of their hiding place a freckled spot of Sun and shade. Peter could smell the musky odor of warm soil and wilted leaf.

They crept cautiously through the thicket and when they gained its edge, where the leaves thinned out, they saw the racing tank far down the field. Its roar came to them as it tore along, bouncing and swaying to the ground's unevenness, the great snout of its cannon pugnaciously thrust out before it, like a stiff-arming football player.

A road ran clear down the field—a road that Peter was sure had not been there the night before. It was a straight road, absolutely straight, running toward the building, and it was of some metallic stuff that shimmered in the Sun.

And far off to the left was another road and to the right another, and in the distance the three roads seemed to draw together, as the rails seem to converge when one looks down a railroad track.

Other roads running at right angles cut across the three roads, intersecting them so that one gained the impression of three far-reaching ladders set tightly side by side.

THE tank raced toward one of the intersecting roads, a tank made midget by the distance,

and its roar came back to them no louder than the humming of an angry bee.

It reached the road and skidded off, whipping around sidewise and slewing along, as if it had hit something smooth and solid that it could not get through, as if it might have struck a soaped metallic wall. There was a moment when it tipped and almost went over, but it stayed upright and finally backed away, then swung around to come lumbering down the field, returning toward the thicket.

Halfway down the field, it pivoted around and halted, so that the gun pointed back toward the intersecting road.

The gun's muzzle moved downward and flashed and, at the intersecting road, the shell exploded with a burst of light and a puff of smoke. The concussion of the shot slapped hard against the ear.

Again and again the gun belched out its shells pointblank. A haze of smoke hung above the tank and road—and the shells still exploded at the road—this side of the road and not beyond it.

The tank clanked forward once more until it reached the road. It approached carefully this time and nudged itself along, as if it might be looking for a way to cross.

From somewhere a long distance off came the crunching sound of artillery. An entire battery of guns seemed to be firing. They fired for a while, then grudgingly quit.

The tank still nosed along the road like a dog sniffing beneath a fallen tree for a hidden rabbit.

"There's something there that's stopping them," said Peter.

"A wall," Mary guessed. "An invisible wall of some sort, but one they can't get through."

"Or shoot through, either. They tried to break through with gunfire and they didn't even dent it."

He crouched there, watching as the tank nosed along the road. It reached the point where the road to the left came down to intersect the crossroad. The tank sheered off to follow the left-hand one, bumping along with its forward armor shoved against the unseen wall.

Boxed in, thought Peter—those roads have broken up and boxed in all the military units. A tank in one pen and a dozen tanks in another, a battery of artillery in another, the motor pool in yet another. Boxed in and trapped; penned up and useless.

And we, he wondered—are we boxed in as well?

A group of soldiers came tramping down the right-hand road. Peter spotted them from far off, black dots moving down

the road, heading east, away from the building. When they came closer, he saw that they carried no guns and slogged along without the slightest semblance of formation and he could see from the way they walked that they were dog-tired.

HE had not been aware that Mary had left his side until she came creeping back again, ducking her head to keep her hair from being caught in the low-hanging branches.

She sat down beside him and handed him a thick slice of bread and a chunk of bologna. She set the bottle of water down between them.

"It was the building," she said, "that built the roads."

Peter nodded, his mouth full of bread and meat.

"They want to make it easy to get to the building," Mary said. "The building wants to make it easy for people to come and visit it."

"The bells again?" he asked.

She smiled and said, "The bells."

The soldiers now had come close enough to see the tank. They stopped and stood in the road, looking at it.

Then four of them turned off the road and walked out into the field, heading for the tank. The others sat down and waited.

"The wall only works one way," said Mary.

"More likely," Peter told her, "it works for tanks, but doesn't work for people."

"The building doesn't want to keep the people out."

The soldiers crossed the field and the tank came out to meet them. It stopped and the crew crawled out of it and climbed down. The soldiers and the crew stood talking and one of the soldiers kept swinging his arms in gestures, pointing here and there.

From far away came the sound of heavy guns again.

"Some of them," said Peter, "still are trying to blast down the walls."

Finally the soldiers and the tank crew walked back to the road, leaving the tank deserted in the field.

And that must be the way it was with the entire military force which had hemmed in the building, Peter told himself. The roads and walls had cut it into bits, had screened it off—and now the tanks and the big guns and the planes were just so many ineffective toys of an infant race, lying scattered in a thousand playpens.

Out on the road, the foot soldiers and the tank crew slogged eastward, retreating from the siege which had failed so ingloriously.

IN their thicket, Mary and Peter sat and watched the Building.

"You said they came from the stars," said Mary. "But why did they come here? Why did they bother with us? Why did they come at all?"

"To save us," Peter offered slowly. "To save us from ourselves. Or to exploit and enslave us. Or to use our planet as a military base. For any one of a hundred reasons. Maybe for a reason we couldn't understand even if they told us."

"You don't believe those other reasons, the ones about enslaving us or using Earth as a military base. If you believed that, we wouldn't be going to the building."

"No, I don't believe them. I don't because I had cancer and I haven't any longer. I don't because the polio began clearing up on the same day that they arrived. They're doing good for us, exactly the same as the missionaries did good among the primitive, disease-ridden people to whom they were assigned. I hope—"

He sat and stared across the field, at the trapped and deserted tank, at the shining ladder of the roads.

"I hope," he said, "they don't do what some of the missionaries did. I hope they don't destroy our self-respect with alien Mother

Hubbards. I hope they don't save us from ringworm and condemn us to a feeling of racial inferiority. I hope they don't chop down the coconuts and hand us—"

But they know about us, he told himself. They know all there is to know. They've studied us for—how long? Squatting in a drugstore corner, masquerading as a cigarette machine. Watching us from the counter in the guise of stamp machine.

And they wrote letters—letters to every head of state in all the world. Letters that might, when finally deciphered, explain what they were about. Or that might make certain demands. Or that might, just possibly, be no more than applications for permits to build a mission or a church or a hospital or a school.

They know us, he thought. They know, for example, that we're suckers for anything that's free, so they handed out free gifts—just like the quiz shows and contests run by radio and television and Chambers of Commerce, except that there was no competition and everybody won.

Throughout the afternoon, Peter and Mary watched the road and during that time small groups of soldiers had come limping down it. But now, for an hour or more, there had been no one on the road.

THEY started out just before dark, walking across the field, passing through the wall-that-wasn't-there to reach the road. And they headed west along the road, going toward the purple cloud of the building that reared against the redness of the sunset.

They traveled through the night and they did not have to dodge and hide, as they had that first night, for there was no one on the road except the one lone soldier they met.

By the time they saw him, they had come far enough so that the great shaft of the building loomed halfway up the sky, a smudge of misty brightness in the bright starlight.

The soldier was sitting in the middle of the road and he'd taken off his shoes and set them neatly beside him.

"My feet are killing me," he said by way of greeting.

So they sat down with him to keep him company and Peter took out the water bottle and the loaf of bread and the cheese and bologna and spread them on the pavement with wrapping paper as a picnic cloth.

They ate in silence for a while and finally the soldier said, "Well, this is the end of it."

They did not ask the question, but waited patiently, eating bread and cheese.

"This is the end of soldiering,"

the soldier told them. "This is the end of war."

He gestured out toward the pens fashioned by the roads and in one nearby pen were three self-propelled artillery pieces and in another was an ammunition dump and another pen held military vehicles.

"How are you going to fight a war," the soldier asked, "if the things back there can chop up your armies into checkerboards? A tank ain't worth a damn guarding ten acres, not when it isn't able to get out of those ten acres. A big gun ain't any good to you if you can't fire but half a mile."

"You think they would?" asked Mary. "Anywhere, I mean?"

"They done it here. Why not somewhere else? Why not any place that they wanted to? They stopped us. They stopped us cold and they never shed a single drop of blood. Not a casualty among us."

He swallowed the bit of bread and cheese that was in his mouth and reached for the water bottle. He drank, his Adam's apple bobbing up and down.

"I'm coming back," he said. "I'm going out and get my girl and we both are coming back. The things in that building maybe need some help and I'm going to help them if there's a way of doing it. And if they don't need no help, why, then I'm going to

figure out some way to let them know I'm thankful that they came."

"Things? You saw some things?"

The soldier stared at Peter. "No, I never saw anything at all."

"But this business of going out to get your girl and both of you coming back? How did you get that idea? Why not go back right now with us?"

"It wouldn't be right," the soldier protested. "Or it doesn't seem just right. I got to see her first and tell her how I feel. Besides, I got a present for her."

"She'll be glad to see you," Mary told him softly. "She'll like the present."

"She sure will." The soldier grinned proudly. "It was something that she wanted."

HE reached in his pocket and took out a leather box. Fumbling with the catch, he snapped it open. The starlight blazed softly on the necklace that lay inside the box.

Mary reached out her hand. "May I?" she asked.

"Sure," the soldier said. "I want you to take a look at it. You'd know if a girl would like it."

Mary lifted it from the box and held it in her hand, a stream of starlit fire.

"Diamonds?" asked Peter.

"I don't know," the soldier said. "Might be. It looks real expensive. There's a pendant, sort of, at the bottom of it, of green stone that doesn't sparkle much, but—"

"Peter," Mary interrupted, "have you got a match?"

The soldier dipped his hand into a pocket. "I got a lighter, miss. That thing gave me a lighter. A beauté!"

He snapped it open and the blaze flamed out. Mary held the pendant close.

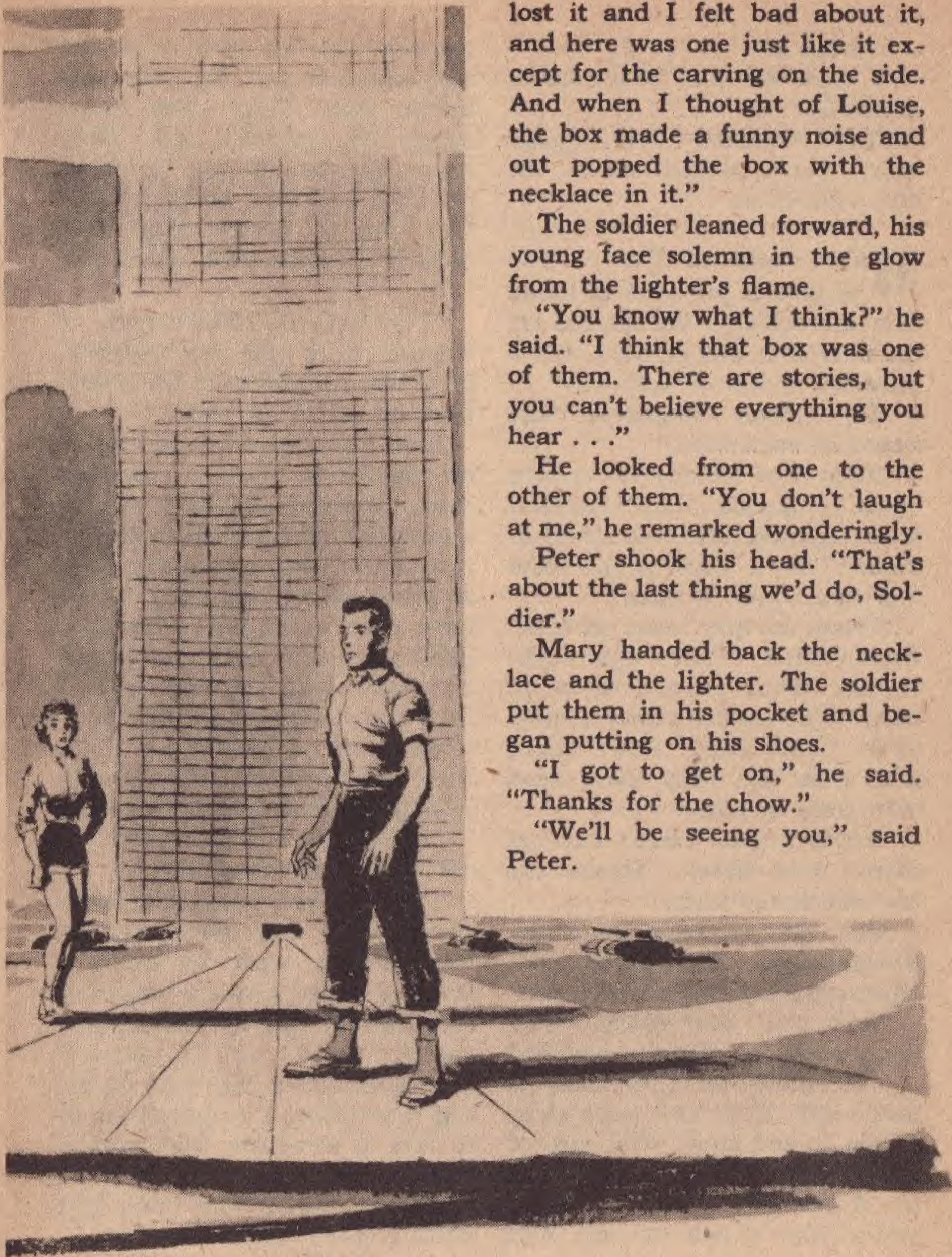
"It's the symbol," she said. "Just like on my bottle of perfume."

"That carving?" asked the soldier, pointing. "It's on the lighter, too."

"Something gave you this?" Peter urgently wanted to know.

"A box. Except that it really was more than a box. I reached down to put my hand on it and it coughed up a lighter and when it did, I thought of Louise and the lighter she had given me. I'd





lost it and I felt bad about it, and here was one just like it except for the carving on the side. And when I thought of Louise, the box made a funny noise and out popped the box with the necklace in it."

The soldier leaned forward, his young face solemn in the glow from the lighter's flame.

"You know what I think?" he said. "I think that box was one of them. There are stories, but you can't believe everything you hear . . ."

He looked from one to the other of them. "You don't laugh at me," he remarked wonderingly.

Peter shook his head. "That's about the last thing we'd do, Soldier."

Mary handed back the necklace and the lighter. The soldier put them in his pocket and began putting on his shoes.

"I got to get on," he said. "Thanks for the chow."

"We'll be seeing you," said Peter.

"I hope so."

"I know we will," Mary stated positively.

They watched him trudge away, then walked on in the other direction.

MARY said to Peter, "The symbol is the mark of them. The ones who get the symbol are the ones who will go back. It's a passport, a seal of approval."

"Or," Peter amended, "the brand of ownership."

"They'd be looking for certain kinds of people. They wouldn't want anybody who was afraid of them. They'd want people who had some faith in them."

"What do they want us for?" Peter fretted. "That's what bothers me. What use can we be to them? The soldier wants to help them, but they don't need help from us. They don't need help from anyone."

"We've never seen one of them," said Mary. "Unless the box was one of them."

And the cigarette machines, thought Peter. The cigarette machines and God knows what else.

"And yet," said Mary, "they know about us. They've watched us and studied us. They know us inside out. They can reach deep within us and know what each of might want and then give it to us. A rod and reel for Johnny and a piece of jade for you. And

the rod and reel were a *human* rod and reel and the jade was Earth jade. They even know about the soldier's girl. They knew she would like a shiny necklace and they knew she was the kind of person that they wanted to come back again and . . ."

"The Saucers," Peter said. "I wonder if it was the Saucers, after all, watching us for years, learning all about us."

How many years would it take, he wondered, from a standing start, to learn all there was to know about the human race? For it would be from a standing start; to them, all of humanity would have been a complex alien race and they would have had to feel their way along, learning one fact here and another there. And they would make mistakes; at times their deductions would be wrong, and that would set them back.

"I don't know," said Peter. "I can't figure it out at all."

They walked down the shiny metal road that glimmered in the starlight, with the building growing from a misty phantom to a gigantic wall that rose against the sky to blot out the stars. A thousand stories high and covering more than a hundred acres, it was a structure that craned your head and set your neck to aching and made your brain spin with its glory and its majesty.

And even when you drew near it, you could not see the dropped and cradled bomb, resting in the emptiness above it, for the bomb was too far away for seeing.

But you could see the little cubicles sliced off by the roads and, within the cubicles, the destructive toys of a violent race, deserted now, just idle hunks of fashioned metal.

THEY came at last, just before dawn, to the great stairs that ran up to the central door. As they moved across the flat stone approach to the stairs, they felt the hush and the deepness of the peace that lay in the building's shadow.

Hand in hand, they went up the stairs and came to the great bronze door and there they stopped. Turning around, they looked back in silence.

The roads spun out like wheel spokes from the building's hub as far as they could see, and the crossing roads ran in concentric circles so that it seemed they stood in the center of a spider's web.

Deserted farm houses, with their groups of buildings—barns, granaries, garages, silos, hog pens, machine sheds—stood in the sectors marked off by the roads, and in other sectors lay the machines of war, fit now for little more than birds' nests or a hiding

place for rabbits. Bird songs came trilling up from the pastures and the fields and you could smell the freshness and the coolness of the countryside.

"It's good," said Mary. "It's our country, Peter."

"It was our country," Peter corrected her. "Nothing will ever be quite the same again."

"You aren't afraid, Peter?"

"Not a bit. Just baffled."

"But you seemed so sure before."

"I still am sure," he said. "Emotionally, I am as sure as ever that everything's all right."

"Of course everything's all right. There was a polio epidemic and now it has died out. An army has been routed without a single death. An atomic bomb was caught and halted before it could go off. Can't you see, Peter, they're already making this a better world. Cancer and polio gone—two things that Man had fought for years and was far from conquering. War stopped, disease stopped, atomic bombs stopped—things we couldn't solve for ourselves that were solved for us."

"I know all that," said Peter. "They'll undoubtedly also put an end to crime and graft and violence and everything else that has been tormenting and degrading mankind since it climbed down out of the trees."

"What more do you want?"

"Nothing more, I guess—it's just that it's circumstantial. It's not real evidence. All that we know, or think we know, we've learned from inference. We have no proof—no actual, solid proof."

"We have faith. We must have faith. If you can't believe in someone or something that wipes out disease and war, what can you believe in?"

"That's what bothers me."

"The world is built on faith," said Mary. "Faith in God and in ourselves and in the decency of mankind."

"You're wonderful," exclaimed Peter.

He caught her tight and kissed her and she clung against him and when finally they let each other go, the great bronze door was opening.

SILENTLY, they walked across the threshold with arms around each other, into a foyer that arched high overhead. There were murals on the high arched ceiling, and others paneled in the walls, and four great flights of stairs led upward.

But the stairways were roped off by heavy velvet cords. Another cord, hooked into gleaming standards, and signs with pointing arrows showed them which way to go.

Obediently, walking in the hush

that came close to reverence, they went across the foyer to the single open door.

They stepped into a large room, with great, tall, slender windows that let in the morning sunlight, and it fell across the satiny newness of the blackboards, the big-armed class chairs, the heavy reading tables, case after case of books, and the lectern on the lecture platform.

They stood and looked at it and Mary said to Peter: "I was right. They were school bells, after all. We've come to school, Peter. The first day we ever went to school."

"Kindergarten," Peter said, and his voice choked as he pronounced the word.

It was just right, he thought, so humanly right: The sunlight and the shadow, the rich bindings of the books, the dark patina of the wood, the heavy silence over everything. It was an Earthly classroom in the most scholarly tradition. It was Cambridge and Oxford and the Sorbonne and an Eastern ivy college all rolled into one.

The aliens hadn't missed a bet—not a single bet.

"I have to go," said Mary. "You wait right here for me."

"I'll wait right here," he promised.

He watched her cross the room and open a door. Through it, he

saw a corridor that went on for what seemed miles and miles. Then she shut the door and he was alone.

He stood there for a moment, then swung swiftly around. Almost running across the foyer, he reached the great bronze door. But there was no door, or none that he could see. There was not even a crack where a door should be. He went over the wall inch by inch and he found no door.

He turned away from the wall and stood in the foyer, naked of soul, and felt the vast emptiness of the building thunder in his brain.

Up there, he thought, up there for a thousand stories, the building stretched into the sky. And down here was kindergarten and up on the second floor, no doubt, first grade, and you'd go up and up and what would be the end—and the purpose of that end?

When did you graduate?

Or did you ever graduate?

And when you graduated, what would you be?

What would you be? he asked.

Would you be human still?

THEY would be coming to school for days, the ones who had been picked, the ones who had passed the strange entrance examination that was necessary to attend this school. They'd come down the metal roads and

climb the steps and the great bronze door would open and they would enter. And others would come, too, out of curiosity, but if they did not have the symbol, the doors would not open for them.

And those who did come in, when and if they felt the urge to flee, would find there were no doors.

He went back into the classroom and stood where he had stood before.

Those books, he wondered. What was in them? In just a little while, he'd have the courage to pick one out and see. And the lectern? What would stand behind the lectern?

What, not who.

The door opened and Mary came across the room to him.

"There are apartments out there," she said. "The cutest apartments you have ever seen. And one of them has our names on it and there are others that have other names and some that have no names at all. There are other people coming, Peter. We were just a little early. We were the ones who started first. We got here before the school bell rang."

Peter nodded. "Let's sit down and wait," he said.

Side by side, they sat down, waiting for the Teacher.

—CLIFFORD D. SIMAK

caretaker

By JAMES H. SCHMITZ



*If you look hard enough, you
can usually find what you're
seeking — or trying to avoid!*

Illustrated by EMSH

"TELL him," said Commander Lowndes' voice, speaking from the great exploration ship stationed on the other side of the world, "that we're recording it officially as Hulman's Planet. I think that might please him."

Marder hesitated with his reply. Through the viewport of the parked little scout flier, he looked out at the vast, shadowy valley before him, at green and scarlet swamps, at gleaming dark waters threaded through them. A huge, blue-wooded wave of mountains rose beyond, the setting sun just touching their crest. In a quarter of an hour, it would be completely dark. His glance turned, almost reluctantly, to the substantial but incongruous reality of Hulman's house nearby, its upper story and roof mirrored in the tiny swamp lake.

"No, it wouldn't please him," he said. "Boyce suggested it during our first visit with Hulman today. He wants us to record it instead as—I'll spell it—C-r-e-s-g-y-t-h. Cresgyth. That's his phonetic interpretation of the

name given it by the people here."

"Fair enough," Commander Lowndes agreed, "if that's how he wants it." He inquired whether Marder had anything to add to the present report.

"Not now," Marder said. "I'll call you back after we've met his woman."

"HIS wife," Lowndes corrected him carefully. "I'm glad it happened to be you and Boyce who found Hulman. You're reliable men; you in particular, Marder. I don't need to emphasize that Hulman's chance discovery of what appears to be the first genuine human race ever encountered outside of Earth is of primary importance . . ." He continued to emphasize that obvious fact at some length. "Boyce might be inclined to hurry through the — ah, diplomatic overtures," he concluded. "You'll be careful about that part of it, Marder?"

"Very careful," Marder promised.

"On the two continents we've scanned so far, we've found no

traces of human inhabitants, present or past. It's possible that Hulman's acquaintances are the sole survivors of humanity here. If we frighten the tribe into hiding, there may never be another contact—and within a hundred years or less, they may have become extinct."

"I understand."

"Fine. Now, then—what about these other creatures? What did Hulman have to say about them?"

"In the twenty years he's been marooned in this valley, he's had only three or four actual encounters with them—rather violent encounters, on his side. Apparently, they learned to avoid him after that. He seems," Marder added thoughtfully, "to have an almost psychopathic hatred for them."

"Not very surprising!" Lowndes' tone was reproofing, reminding Marder that Hulman had been, for the past forty years, one of the great, legendary names of stellar exploration. "Deems' scout reports it bagged a couple of specimens a few hours ago and is bringing them in. The description checks with what Hulman gave you—a wormlike, blue body with a set of arms, legs, and a head. Out of water, they appear to wear some kind of clothes, presumably to conserve body moisture."

Marder agreed that it checked.

"We've found them remarkably elusive otherwise," Lowndes went on. "There seems to have been a widespread rudimentary civilization along the seas and major lake coasts—amphibious cave-builders is what they were originally. But all the caves we examined have been deserted for centuries, at least, which indicates major migratory movements of the species inland. The seas and lakes are almost completely barren of life above the plankton level."

There had been, according to Hulman, some kind of planetary catastrophe, Marder said. Hunger had driven the "snakes," as he called them, out of the great lake chains of their origin, up into the valley swamp lands and along the river courses, forcing the remnants of the mysterious human race ahead of them in their slow migration and gradually reducing the human living area. Hulman had killed six of the bluish, wormlike creatures in this section of the valley, in the first few years after he had crashed on the planet; after that, they had ceased to show up here. But, until now, he had been unable to give the humans more effective help.

AFTER Lowndes cut contact, Marder remained sitting in the scout for a time, gazing out at

the vast, darkening valley with troubled, puzzled eyes. For twenty-two years after the destruction of his ship, Hulman had lived here, separated from the humanity of his origin by an enormity of light-years, by the black abyss of space, but in the company of a woman who was of an alien, dying race.

"My wife!" Hulman had said, not defiantly but proudly, in speaking of her. "I called her Celia from the start, and she liked the name."

Hidden somewhere in the shadowed swamps, the woman he'd called Celia was watching Hulman's great log house until she could overcome her timidity of the visitors from space.

"She'll show up some time during the night," Hulman had laughed. "I'm leaving the doors open for her. I'll talk to her a little first, to reassure her, and you can meet her then. Meanwhile, why don't you have a look at her picture."

Years ago, as a boy, Marder had first seen Hulman's early paintings of the outer worlds and, like countless thousands of others before and since, he had felt his imagination swell and grow wide with the cosmic grandeur of Hulman's vision of universal life.

In the fifty or so paintings he had seen in the log house that day, the great sweep of space had

dwindled to something apparently much more commonplace. Hulman's imagination seemed to have shrunk to correspond to the physical limitations of the valley that confined him. However, he had retained a characteristic and extraordinary precision of lifelike detail, particularly in regard to the human beings he had found here.

They were beautiful creatures; but the paintings aroused a revulsion in Marder, in which he recognized a vague flavoring of terror. In the one painting Hulman showed them of the woman Celia, that effect was particularly pronounced. Marder found it difficult to explain to himself. Boyce seemed insensitive to it, and there was nothing in Hulman's words or attitude to provide additional clues.

Re-entering the house, Marder glanced back with more than a trace of uneasiness at the swamp from the doors Hulman had left open. After twenty years, Hulman should know whether danger threatened him from there; but for a visitor on a strange world, "it" and "they" were always present in the unknown dark outside—fears that usually were imaginary, but sometimes were not.

Marder smiled a little grimly at his own present apprehensions and went in.

HE found Hulman and Boyce in a cavernous cellar level beneath the house itself. It was well lit and showed familiar and reassuring features; power plants, storage rooms, even a hydroponic garden. The two men stood beside the opening of a deep fresh-water well, twenty feet across, which took up the left side of the main cellar hall.

"Sixty feet down, it's ten degrees Fahrenheit," Hulman was stating, with a disarming house-owner's pride. He was a big man, rather heavy now, with a square-cut brown beard that showed only a few traces of gray. "I got the idea from Celia's people. Swamp water's none too healthy here at various seasons, but the well taps an underground river that's as pure as you could wish—" He caught sight of Marder. "Any news?" His face had become suddenly anxious.

"They're going to wait over there with the ship," Marder said, "a week or more, if required. We're to follow your judgment in every way in establishing contact with the Cresgythians."

"Good!" Hulman was obviously relieved. "We can't do anything till Celia comes in—and we'll have to be very tactful then. But I'm sure it won't take a week."

"What makes them so shy of us?" Boyce inquired.

A shadow passed over Hulman's face. "It's not you," he said. "It's me . . . Or it's an impression I gave them of the Earth kind of human beings."

Back upstairs, with the three of them settled comfortably in the big living room, he explained. He'd given Boyce and Marder a room together on the top floor of the house, across a small hall from his own room and that of his wife.

"I've never asked Celia much about her people," he said. "There's some kind of very strong taboo that keeps her from talking about them. When I tried to press her for details at first, it was almost as if I were committing some sort of gross indecency. But I do know they hate violence, insanity—anything unbeautiful! And, you see . . ."

When his ship crashed into the valley, he was the only man left alive on her out of the original crew of four. "Banning went insane two days before that and killed Nichols and Dawson," he said, his face drawn and taut, remembering it again over a period of twenty-two years. He paused. "And so I killed Banning before he could wreck the ship completely." He looked from one to the other of them. "It was unavoidable. But they never understood that, these people of Celia's."

"How did they find out?" Marder stirred uncomfortably.

Hulman shrugged. "I was unconscious for about a month and completely blind for six months afterward. They got me out of the wreck and nursed me back to life, but as soon as I was out of danger, only Celia would stay with me. She and I were alone for weeks before I regained my sight. How did they find out? They're sensitive in a number of ways. And there were those bodies in the ship. They—withdrew from me," he said with a grimace, "as soon as I no longer needed their help."

"Then in all this time," Marder said slowly, "you never were able to gain their confidence?"

Hulman stared at him a moment, apparently weighing the words. "It's not a question of confidence," he said finally. "It's a question of—well, I'm trying to tell you! I didn't mind being alone with Celia." He grinned suddenly, almost boyishly. "The others stayed in a small lake village they had a couple of miles up the valley, across the swamps. Celia went up there every few days, but she never brought anyone back with her. I suspected it was simply because I was an alien. I thought they'd get over that in time. Celia seemed happy enough, so it wasn't a very acute problem—"

He paused a few seconds, frowning. "One day, when she'd slipped away again, I remembered a pair of field glasses I'd taken off the ship, and I got them and trained them on the village. That was a very curious experience—I never have found a complete explanation for it. For just one instant, I had everything in the clearest possible focus. There were children playing on the platforms above the water; a few adults standing in the doorway of a house. And, suddenly, everything blurred!" Hulman gave a short hacking laugh. "Can you imagine that? They didn't want me to look at them, so they just blurred my vision!"

"Eh?" Boyce was frowning.

Marder sat still, startled, feeling the uneasiness growing up in him again.

Hulman smiled crookedly. "That's all I can tell you. The glasses had a four-mile range and they were functioning perfectly, but the instant I turned them on the village, the field blurred. I'd never felt so wholeheartedly—and successfully—snubbed before."

BOYCE laughed uncomfortably and glanced at Marder. He was still more than a little in awe of Hulman, of the shining legend miraculously resurrected from the black tomb of space; but he, too, Marder decided, had

the vague sense of something disturbing and out of order here. Well, so much the better. There would be two of them to look out for trouble, if trouble came.

"I'll admit the trick annoyed me," Hulman said, "as soon as I'd got over my first surprise at it. Next day, I announced to Celia that I was going over to the village. She made no objection, but she followed me at a distance—probably to make sure I didn't drown on the way. It's wet going around here. At last I came over a rise and found myself a hundred yards from the village, on the land side. Almost immediately, I realized they had abandoned it. I walked around it a while and found cooking fires still glowing; but nobody had waited to receive me. So I went home, insulted and very sulky—I wouldn't even talk to Celia until the next morning!"

He laughed. "I got over that in a hurry. And then I settled down to building us a house of our own, much bigger and better than anything they had in the village; and that took up all my time for several months. For that whole period, I ignored our neighbors quite as thoroughly as they had ignored me."

He grinned at his guests a little shamefacedly. "But you know, I couldn't keep it up then. There was something so curiously hap-

py and peaceful about them, even if they were giving me the cold shoulder. And the one good look I'd had of them had showed me they were physically the most beautiful people I'd ever seen. One day, when Celia was gone, I made another trip to the village—with exactly the same results as the first one. So I decided to look around for a less exclusive neighborhood.

"I'd got the little flier of my ship repaired enough to take it off the ground and set it down again; and I calculated I'd salvaged enough fuel for at least one twenty-four-hour trip. Celia watched me take off. I flew high over the village and could see them down there, ignoring me as usual. Then I flew down the valley for almost fifty miles before I came across the first colony of the other ones—the snakes!"

MARDER remembered something Lowndes had said. "Do the snakes live in caves?"

"No!" Hulman said distastefully. "That's what fooled me. It was a village of stake houses set into the head of a little lake, almost like the one here. I set down on the lake, coasted up to the village, climbed up a ladder, and saw them!"

He shuddered. "They just stood there, very quietly, watching me from the doors and windows.

What made it worse somehow was that they wore clothes—but the clothes didn't cover enough. Those weaving, soft, blue bodies and staring eyes! I backed off down the ladder, with my gun ready, in case they rushed me; but they never moved . . ."

He had found eight more colonies of the snakes farther down the valley, but no trace of another tribe of his beautiful humanoids. He flew up the valley then, high up into the mountains, almost exhausting his fuel; and beside a glacier-fed mountain lake was a tiny stake village, built into the water. And they were snakes again.

"At the time, I didn't know just what to make of it. There was the possibility that my village represented an advance troop of human beings into a land of snakes. But I suspected—I felt—even then, that it was the other way around; that it was the snakes that were encroaching on the humans. So I swore to myself that as long as I lived, at least, human beings were going to hold this section of the valley undisturbed and in safety.

"When I came back, I said to Celia—she was standing at the same spot I'd seen her last, as if she'd never left it—'Celia, I must speak to your people. Go tell them I will come again tomorrow and that they must not run

away.' She looked at me silently for a long time, and then she turned and left in the direction of the village. She came back late at night and crept into my arms and said, 'They have promised to wait for you.'

"I set out next morning, full of great plans. The snakes lived in widely scattered settlements, after all. The villagers and I could wipe out those settlements one by one, until we'd cleared the land about us! That was the natural solution, wasn't it? I didn't realize then how different, in some ways, Celia's people were from us!"

BOYCE asked uneasily, "What happened?"

"What happened?" Hulman repeated. "Well, I came over that rise, and there the village was. This time I knew they'd stayed at home! Then, not twenty feet off my path, I saw two of the snakes standing in the bushes, one watching me, the other looking at the village. Each had a kind of chunky crossbow across his shoulders; and they couldn't be seen from the village . . ."

He paused and shook his head. "So I shot them both down, before they got over their surprise. That was all." He looked from one to the other again. "It was the natural thing to do, wasn't it?"

Boyce nodded uncertainly. Marder said nothing.

Hulman leaned forward. "But apparently, from the point of view of the villagers, it wasn't! Because when I was done with the snakes—one of them took three shots before it would lie still—the village was empty again. When I got back home, I was actually sick with disappointment. And then I discovered that Celia was gone!

"That was a bad three days. But she came back then. And on the morning she came back, I discovered they'd broken up the village overnight and moved on. I think they're not more than ten or twenty miles distant from here, but I never tried to look them up again."

Boyce said puzzled, "But I don't see—"

"Neither did I," Hulman interrupted, "until it was too late!" He gave his short bark of laughter again; there was, Marder realized, a sort of suppressed fury in it. "They won't kill their enemies—they're too polite for that! So their enemies are gradually squeezing them out of existence."

The three men studied each other in silence for a moment. Then Marder asked slowly, "Captain Hulman, what do you expect us to do in this situation?"

"Kill the snakes!" Hulman said promptly. "As many as we can

find! If the human beings of this world won't defend themselves, we'll have to defend them. As long as I've been here, no party of snakes has come past this point of the valley. A few of them have tried!" His eyes glittered with open hatred. "But I can't be on guard here forever. It's up to you and the other men on the ship to do the job right!"

THOUGH Boyce was sleeping uneasily, Marder hadn't yet shut his eyes. The uneasiness was in him, too; and in him it was strong enough to offset the fatigue and excitement of the day. Vague night sounds came into the room they shared, a plaintive, thin calling like the distant cry of a bird. Not too different from the sounds on many other worlds he had known, and, as on all worlds that were new and strange, faintly tinged with the menace that was largely in the imagination.

But it was Hulman himself who was the principal cause of Marder's uneasiness.

The face of the old explorer, the rumbling, angry voice, his monomaniacal devotion to the strange humanoids kept recurring in his mind. Nothing Hulman had done previously to stimulate the imagination of Earthmen toward the laborious exploration of space could equal

this final accidental achievement: to have encountered the first other human beings Earthmen had yet discovered in the Universe. Men had looked out from their world like children staring into a great, dark forbidding room. They had found space to be peopled sparsely with intelligent life—life that was sometimes horrible, sometimes merely odd, sometimes beautiful in weird, incomprehensible ways. But never enough like Man to be acceptable!

Hulman's fierce insistence on protecting what seemed to be the dying remnants of a human race against its own wishes was something Marder could understand well enough. He did not doubt that Boyce and the others would respond wholeheartedly to that insistence. Here was the proof that human life could rise spontaneously and endlessly throughout all the galaxies, that the Universe was not a darkened room, after all, but one lighted forever by the fires of humanity.

They had to protect that proof . . .

Strangely enough, though Boyce was asleep and he awake, it was Boyce who first seemed aware of motion in the house. Marder heard him breathe and stir unquietly, and then come awake and grow still, listening, waiting. He smiled faintly at the

familiar signs, the tense alertness, the silent questioning of the strange world about them: "What is it? Who moves?" On many other strange, dark worlds, he had been among Earthmen as they came awake, asking that question. And he with them . . .

He grew aware of it then: there was motion in the house now, beyond the walls. Gradually, it resolved itself into slow, heavy steps on the carpeted flooring; and the picture of Hulman leaving his room to peer down the stairs came so convincingly into his mind that at once he relaxed again. And he was aware that Boyce was relaxing too.

Neither of them spoke. After a time, Hulman went back to his room, walking carefully so as not to disturb his guests; and the house was still. Presently, Boyce was sleeping again. Marder tried to pick up the train of thoughts he had been following before the disturbance; but they eluded him now. Fatigue grew up in him like waves of mental darkness, smothering the remnants of uneasiness; and reluctantly he let himself drift off.

The blast that roused him seemed to have gone off almost beside his head.

HE found himself standing in the center of the room, gun in one hand, flashbeam in the

other. Boyce's wide back was just disappearing through the door into the dark hall beyond; and Boyce's shout was in his ears:

"Hulman! They've got Hulman!"

Marder halted a fraction of a second, checked by the ridiculous hesitation of a man who doesn't want to go out into a strange house undressed; then he was following Boyce. As he plunged down the broad staircase to the lower floor of Hulman's house, a memory flashed into his mind: the guns that Hulman, cut off from standard power sources, had manufactured for himself here and shown them earlier in the evening. It had been the report of a missile gun that had awakened him; one of Hulman's own.

He lost Boyce's light for a moment when he reached the lower floor, and stood in indecision until he heard a muffled shouting to his left, and remembered the descent into the cellars. As he reached the door, there was another angry shout from Boyce, and a blaze of pink light from below. Boyce had cut loose with his gun, so he was in contact with the intruders; and things would have to be finished very quickly now—a thermion spray was not designed to be an indoor weapon!

Marder reached the bottom of the cellar stairs seconds later.

A hedge of flame to their right, steady, impenetrable and soundless, slanted from the wall half around the great well. It cut them off from further advance; presumably it had cornered their antagonists.

Boyce, dressed in nightshorts, turned a furiously contorted face to him.

"One of them ducked around the corner over there! It can't get out. It was carrying Hulman!"

"Where is Hulman?"

"Over there—dead!"

MARDER squinted against the reflected glare of the fire. Something dark lay hunched against the wall beyond the well; that was all he could make out.

"Sure he's dead?" His voice carefully matter-of-fact.

"Of course!" Boyce said beside him. The hand that held the gun was shaking. "When it dropped him—when I snapped a bolt at it—I saw he'd been shot through the head with his own gun!"

"The natives?" Marder asked, still carefully.

"No. Something—those snakes he was afraid of—some animal. It whipped around the corner before I saw it very clearly—"

His voice had gone dull. Marder glanced at him quickly. Boyce was in a state of semi-shock, and they had only a few minutes before the fire ate far enough into

the walls to threaten their retreat upstairs and out of the house. He had no personal qualms about leaving Hulman's body and Hulman's slayers to roast together—the coincidence of murder on that particular night was something one could figure out more conveniently later—but Boyce might present a problem.

A voice addressed them from out of a passage beyond the well.

"You who were his friends," it said, "will you listen to me?"

Marder felt his scalp crawling.

"Who are you?" he called back.

"He called me his wife."

Boyce started violently, but Marder waved him to silence. It was a rich, feminine voice, a trifle plaintive; it was not difficult to fit it mentally to the painting of Hulman's wife.

"Why did you kill him?"

There was a pause.

"But I thought you understood," the voice said. "Your medical men would say that he had been insane for twenty years, as he counted time. They would have forced him back into sanity. I could not bear the thought that he should suffer that."

Marder swallowed hard. "Suffer what?"

"Are you all fools? *He* was a fool, though I loved him. He could not see behind the shape of things. So—here among us—he saw shapes he could bear to see.

In those moments when sanity came to him and he really saw what was there—then he killed. Are you *all* like that?"

BOYCE stared at Marder, his mouth working. "What is she talking about?" he whispered hoarsely. "Is the snake with her?"

"Go upstairs, Boyce! Wait for me outside!"

"Are you going to kill the snake?"

"Yes, I'll kill the snake."

Boyce disappeared up the stairs.

"The house is burning, but there is some time left," Marder told the voice then. "Is there any way you can save yourself?"

"I can leave by the river that flows under the well," the voice said, "if you do not shoot at me."

"I won't shoot at you."

"May I take his body?"

Marder hesitated. "Yes."

"And you will all leave with your ship? I loved him, though my people thought it strange almost beyond their tolerance. They are foolish, too, yet not as foolish as you are. They saw what was in his mind and not beyond that, and so they were afraid of him. But he is dead now and there is nothing that your people and mine could share. We are too different. Will you leave?"

Marder moistened his lips. "We'll leave," he said, seeing it all now, and glad he had sent

Boyce upstairs. "What did you see beyond what was in his mind?"

"A brave spirit, though very frightened," the voice said slowly. "He ventured far and far and far into the dark of which he was afraid. I loved him for that!" It paused. "I am coming now," it added, "and I think you had better look away."

Marder did not intend to look away, but at the last moment, when there was movement at the corner of the passage, he did. He saw only a swift undulating shadow pass along the wall, pause and stoop quickly, rise again with a bulky burden clasped to it, glide on and vanish.

He stood staring at the blank wall until there was a faint splash in the well far below him.

THE great ship was drifting slowly above the night side of the world it was leaving, when Commander Lowndes joined Marder at the observation port.

"Boyce will make out all right," he said moodily. "He only guessed part of the truth, and that bit is being taken from his mind." He studied Marder thoughtfully. "If you'd looked squarely at the thing, we might have had to give you the same treatment. Our pickled specimens are pretty damned hideous."

Marder shrugged. Lowndes sat

on the edge of a table.

"Selective hysterical blindness maintained for twenty-two years—with his own type of artistic hallucinations thrown in! I can't help wishing it hadn't happened to Hulman."

"He didn't maintain it throughout," Marder said slowly. "And whenever he saw them clearly, he killed them . . ."

"Who wouldn't? I almost feel," Lowndes said, "like getting out of space and staying out, for good!"

Which was giving it the ultimate in emphasis.

"What are you reporting?" Marder asked.

"That Hulman died here, quite peacefully, about a year before we found him—leaving a diary of inspiring courage and devotion to space exploration behind him. We'll have time enough to work up the diary. That should keep everybody happy. Marder," he said suddenly, waving his hand at the observation port, "do you think there actually are—well, *people* out there. Somewhere?"

Marder looked out at the vast, star-studded, shining black immensity.

"I hope so," he said.

"Do you think we'll ever find them?"

"I don't know," Marder said thoughtfully. "They've never found us."

—JAMES H. SCHMITZ

Home is the Hunter

Incentives change constantly,

but one thing never does—the

idea that they are permanent!

By C. L. MOORE and HENRY KUTTNER

THERE'S nobody I can talk to except myself. I stand here at the head of the great waterfall of marble steps dropping into the reception hall below, and all my wives in all their jewels are waiting, for this is a Hunter's Triumph—my Triumph, Honest Roger Bellamy, Hunter. The light glitters on the glass cases down there with the hundreds of dried heads that I have taken in fair combat, and I'm one of the most powerful men in New York.

The heads make me powerful. But there's nobody I can talk to. Except myself? Inside me, listening, is there another Honest Roger Bellamy? I don't know. Maybe he's the only real part of me. I go along the best I can, and it doesn't do any good. Maybe the Bellamy inside of me doesn't like what I do. But I have to do it. I can't stop, for I was born a Hunter. It's a great heritage to be born to. Who doesn't envy me? Who wouldn't change with me, if they could?

Illustrated by ASHMAN

But knowing that doesn't help at all.

I'm no good.

Listen to me, Bellamy, listen to me, if you're there at all, deep inside my head. You've got to listen—you've got to understand. You, there, inside the skull. You can turn up in a glass case in some other Hunter's reception hall any day now, any day, with the crowds of Populi outside pressing against the view-windows and the guests coming in to see and envy, and all the wives standing by in satin and jewels.

Maybe you don't understand, Bellamy. You should feel fine now. It must be that you don't know this real world I have to go on living in. A hundred years ago, or a thousand, it might have been different. But this is the Twenty-first Century. It's today, it's now, and there's no turning back.

I don't think you understand.

YOU see, there isn't any choice. Either you end up in another Hunter's glass case, along with your whole collection of heads, while your wives and children are turned out to be Populi, or else you die naturally (suicide is one way) and your eldest son inherits your collection, and you become immortal, in a plastic monument. You stand forever in transparent plastic on a pedestal along the edge of Central Park,

like Renway and old Falconer and Brennan and all the others. Everyone remembers and admires and envies you.

Will you keep on thinking then, Bellamy, inside the plastic? Will I?

Falconer was a great Hunter. He never slowed down, and he lived to be fifty-two. For a Hunter, that is a great old age. There are stories that he killed himself. I don't know. The wonder is that he kept his head on his shoulders for fifty-two years. The competition is growing harder, and there are more and more younger men these days.

Listen to me, Bellamy, the Bellamy within. Have you ever really understood? Do you still think this is the wonderful young time, the boyhood time, when life is easy? Were you ever with me in the long, merciless years while my body and mind learned to be a Hunter? I'm still young and strong. My training has never stopped. But the early years were the hardest.

Before then, there was the wonderful time. It lasted for six years only, six years of happiness and warmth and love with my mother in the harem, and the foster-mothers and the other children. My father was very kind then. But when I was six, it stopped. They shouldn't have taught us love at all, if it had to end so

soon. Is it that you remember, Bellamy within? If it is, it can never come back. You know that. Surely you know it.

The roots of the training were obedience and discipline. My father was not kind any more. I did not see my mother often and, when I did, she was changed, too. Still, there was praise. There were the parades when the Populi cheered me and my father. He and the trainers praised me when I showed I had special skill in the duel, or in marksmanship, or judo-stalking.

It was forbidden, but my brothers and I sometimes tried to kill each other. The trainers watched us carefully. I was not the heir, then. But I became the heir when my elder brother's neck was broken in a judo-fall. It seemed an accident, but of course it wasn't, and then I had to be more careful than ever. I had to become very skillful.

All that time, all that painful time, learning to kill. It was natural. They kept telling us how natural it was. We had to learn. And there could be only one heir . . .

We lived under a cloud of fear even then. If my father's head had been taken, we would all have been turned out of the mansion. Oh, we wouldn't have gone hungry or unsheltered. Not in this age of science. But not to be a Hunter! Not to become immortal,

in a plastic monument standing by Central Park!

SOMETIMES I dream that I am one of the Populi. It seems strange, but in the dream I am hungry. And that is impossible. The great power plants supply all that the world needs. Machines synthesize food and build houses and give us all the necessities of life. I could never be one of the Populi, but if I were, I would go into a restaurant and take whatever food I wished out of the little glass-fronted compartments. I would eat well—far better than I eat now, as a matter of fact. And yet, in my dream, I am hungry.

Perhaps the food I eat does not satisfy you, Bellamy within me. It does not satisfy me, but it is not meant to. It is nutritious. Its taste is unpleasant, but all the necessary proteins and minerals and vitamins are in it to keep my brain and body at their highest pitch. And it should not be pleasant. It is not pleasure that leads a man to immortality in plastic. Pleasure is a weakening and an evil thing.

Bellamy within—do you hate me?

My life has not been easy. It isn't easy now. The stubborn flesh fights against the immortal future, urging a man to be weak. But if you are weak, how long



can you hope to keep your head on your shoulders?

The Populi sleep with their wives. I have never even kissed any of mine. (Is it you who have sent me those dreams?) My children? Yes, they are mine; artificial insemination is the answer. I sleep on a hard bed. Sometimes I wear a hair shirt. I drink only water. My food is tasteless. With my trainers I exercise every day, until I am very tired. The life is hard—but in the end we shall stand forever in a plastic monument, you and I, while the world envies and admires. I shall die a Hunter and I shall be immortal.

The proof is in the glass cases down there in my reception hall. The heads, the heads—look, Bellamy, so many heads! Stratton, my first. I killed him in Central Park with a machete. This is the scar on my temple that he gave me that night. I learned to be more deft. I had to.

Each time I went into Central Park, fear and hate helped me. Often it is dreadful in the Park. We go there only at night, and sometimes we stalk for many nights before we take a head. The Park is forbidden, you know, to all but Hunters.

It is our hunting ground.

I have been shrewd and cunning and resourceful. I have shown great courage. I have stopped my fears and nursed my

hate, there in the Park's shadows, listening, waiting, stalking, never knowing when I might feel sharp steel burning through my throat. There are no rules in the Park. Guns or clubs or knives—once I was caught in a man-trap, all steel and cables and sharp teeth. But I had moved in time, and fast enough, so I kept my right hand free and shot Miller between the eyes when he came to take me. There is Miller's head down in that case. You would never know a bullet had gone through his forehead, for the thanologists are clever. But usually we try not to spoil the heads.

WHAT is it that troubles you so, Bellamy within? I am one of the greatest Hunters in New York. But a man must be cunning. He must lay traps and snares a long way in advance, and not only in Central Park. He must keep his spies active and his lines of contact taut in every mansion in the city. He must know who is powerful and who is not worth taking. What good would it do to win against a Hunter with only a dozen heads in his hall, while risking your own collection and your own head?

I have hundreds. Until yesterday, I stood ahead of every man in my age-group. Until yesterday, I was the envy of all I knew, the idol of the Populi, the ac-

knowledge master of half New York. Half New York! Do you know how much that meant to me? That my rivals loathed me and acknowledged me their better?

You do know, Bellamy. It was the breath of life that True Jonathan Hull and Good Ben Griswold ground their teeth when they thought of me, and that Black Bill Lindman and Whistler Cowles counted their trophies and then called me on the TV phone and begged me with tears of hate and fury in their eyes to meet them in the Park and give them the chance they craved.

I laughed at them. I laughed Black Bill Lindman into a berserker rage and then almost envied him, because I have not been berserker myself for a long while now. I like that wild unloosening of all my awareness but one—the killing instinct, blind and without reason. I could forget even you then, Bellamy within.

But that was yesterday.

And yesterday night, Good Ben Griswold took a head. Do you remember how we felt when we learned of it, you and I? First I wanted to die, Bellamy. Then I hated Ben as I have never hated anyone before, and I have known much hate. I would not believe he had done it. I would not believe *which* head he took.

I said it was a mistake, that he

took a head from the Populi. But I knew I lied. No one takes a common head. They have no value. Then I said to myself, "It can't be the head of True Jonathan Hull. It can't be. It must not be!" For Hull was powerful. His hall held almost as many heads as mine. If Griswold were to have them all, he would be far more powerful than I.

The thought was a torment I could not endure.

I put on my Status Cap, with one bell on it for each head I have taken, and I went out to see. It was true, Bellamy.

The mansion of Jonathan Hull was being emptied. The mob was surging in and out, while Hull's wives and children were leaving in little, quiet groups. The wives did not seem unhappy, but the boys did. (The girls had been sent to the Populi at birth, naturally; they are worthless.) I watched the boys for a while. They were all wretched and angry. One was nearly sixteen, a big, agile lad who must have nearly finished his training. Someday I might meet him in the Park.

The other boys were all too young. Now that their training had been interrupted, they would never dare enter the Park. That, of course, is why none of the Populi ever become Hunters. It takes long years of arduous training to turn a child from a rabbit

to a tiger. In Central Park, only the tigers survive.

I LOOKED through True Jonathan's view-windows. I saw that the glass cases in his reception hall were empty.

"So it is not a nightmare or a lie—Griswold does have them," I thought, "and True Jonathan's, besides."

I went into a doorway and clenched my fists and beat them against the brownstone and groaned with self-contempt.

I was no good at all. I hated myself, and I hated Griswold, too. Presently it was only that second hate that remained, so I knew what I had to do.

"Today," I thought, "he stands where I stood yesterday. Desperate men will be talking to him, begging him, challenging him, trying every means they know to get him into the Park tonight. But I am crafty. I make my plans far ahead. I have networks that stretch into the mansions of every Hunter in the city, crossing their own webs."

One of my wives, Nelda, was the key here. Long ago I realized that she was beginning to dislike me. I never knew why, but I fostered that dislike until it became hate. I saw to it that Griswold would learn the story. It is by strategems like this that I became as powerful as I was then—

and will be again, will surely be again.

I put on a glove, with hair and knuckle-lines and nails painted on to look like a hand, and I went to my TV phone and called Good Ben Griswold. He came grinning to the screen.

"I challenge you, Ben," I said. "Tonight at nine, in the Park, by the carousel site."

He laughed at me. He was a tall, heavily muscled man with a thick neck.

I looked at his throat.

"Tonight at nine," I repeated.

He laughed again. "Oh, no, Roger," he said. "Why should I risk my head?"

"You're a coward."

"Certainly I'm a coward," he agreed, still grinning, "when there's nothing to gain and everything to lose. Was I a coward last night, when I took Hull's head? I've had my eye on him a long time, Roger. I'll admit I was afraid you'd get him first. Why didn't you, anyway?"

"It's your head I'm after, Ben."

"Not tonight," he said. "Not for quite a while. I'm not going back to the Park for a long time; I'll be too busy. You're out of the running, anyhow, Roger. How many heads have you?"

He knew, damn him, how far ahead of me he was—now. I let the hate show in my face.

"The Park at nine tonight," I

yelled. "The carousel site. Or else I'll know you're afraid."

"Eat your heart out, Roger," he mocked me. "Tonight I lead a parade. Watch me. Or don't—but you'll be thinking about me. You can't help that."

"You swine! You rotten, cowardly swine!"

HE laughed; he derided me, he goaded me, as I had done so many times to others. I did not have to pretend anger. I wanted to reach into the screen and sink my fingers in his throat. The furious rage was good to feel. It was very good. I let it build until it seemed high enough. I let him laugh and enjoy it.

Then at last I did what I had been planning. At the right moment, when it looked convincing, I let myself lose all control and I smashed my fist into the TV screen. It shattered. Griswold's face flew apart; I liked that. It was very satisfying.

The connection was broken, of course. But I knew he would check quickly back. I slipped the protective glove from my right hand and called a servant I knew I could trust. (He is a criminal; I protect him. If I die, he will die and he knows it.) He bandaged my unharmed right hand and I told him what to say to the other servants. I knew the word would reach Nelda quick-

ly, in the harem, and I knew that Griswold would hear within an hour.

I fed my anger. All day, in the gymnasium, I practiced with my trainers, machete and pistol in my left hand only. I made it seem that I was approaching the berserker stage, the killing madness that overcomes us when we feel we have completely failed.

That kind of failure can have one of two results only. Suicide is the other. You risk nothing then, and you know your body will stand by the Park in its plastic monument. But sometimes the hate turns outward and there is no fear left. Then the Hunter is berserker, and while this makes him very dangerous, he is also good quarry then—he forgets his cunning.

It was dangerous to me, too, for that kind of forgetfulness is very tempting, the next best thing to oblivion itself.

Well, I had set the lure for Griswold. But it would take more than a lure to bring him out when he thought he had nothing to gain by such a risk. So I set rumors loose. They were very plausible rumors. I let it be whispered that Black Bill Lindman and Whistler Cowles, as desperate as I at Griswold's triumph over us all, had challenged each other to a meeting in the Park that night. Only one could come out alive, and

that one would be master of New York so far as our age-group counted power. (There was, of course, old Murdoch with his fabulous collection accumulated over a lifetime, but it was only among ourselves that the rivalry ran so high.)

WITH that rumor abroad, I thought Griswold would act. There is no way to check such news. A man seldom announces openly that he is going into the Park. It could even be the truth, for all I knew. And for all Griswold knew, his supremacy was in deadly peril before he had even enjoyed his Triumph. There would be danger, of course, if he went out to defend his victory. Lindman and Cowles are both good Hunters. But Griswold, if he did not suspect my trap, had a chance at one sure victory — myself, Honest Roger Bellamy, waiting in berserker fury at a known rendezvous and with a right hand useless for fighting. Did it seem too obvious? Ah, but you don't know Griswold.

When it was dark, I put on my hunting clothes. They are bulletproof, black, close-fitting, but very easy with every motion. I blacked my face and hands. I took gun, knife and machete with me, the metal treated so that it would not catch or reflect the light. I like a machete especially

—I have strong arms. I was careful not to use my bandaged hand at all, even when I thought no one watched me. And I remembered that I must seem on the verge of berserker rage, because I knew Griswold's spies would be reporting every motion I made.

I went toward Central Park, the entrance nearest the carousel site. That far Griswold's men could track me, but no farther.

At the gate I lingered for a moment — do you remember this, Bellamy within me? Do you remember the plastic monuments we passed on the edge of the Park? Falconer and Brennan and the others, forever immortal, standing proud and godlike in the clear, eternal blocks. All passion spent, all fighting done, their glory assured forever. Did you envy them, too, Bellamy?

I remember how old Falconer's eyes seemed to look through me contemptuously. The number of heads he had taken is engraved on the base of his monument, and he was a very great man.

"Wait," I thought. "I'll stand in plastic, too. I'll take more heads than even you, Falconer, and the day that I do, it will be the day I can lay this burden down . . ."

Just inside the gate, in the deep shadows, I slipped the bandage from my right hand. I drew my black knife and, close against

the wall, I began to work my way rapidly toward the little gate which is nearest Griswold's mansion. I had, of course, no intention of going anywhere near the carousel site. Griswold would be in a hurry to get to me and out again, and he might not stop to think. Griswold was not a thinker. I gambled on his taking the closest route.

I waited, feeling very solitary and liking the solitude. It was hard to stay angry. The trees whispered in the darkness. The moon was rising from the Atlantic beyond Long Island. I thought of it shining on the Sound and on the city. It would rise like this long after I was dead. It would glitter on the plastic of my monument and bathe my face with cold light long after you and I, Belamy, are at peace, our long war with each other ended.

THEN I heard Griswold coming. I tried to empty my mind of everything except killing. It was for this that my body and mind had been trained so painfully ever since I was six years old. I breathed deeply a few times. As always, the deep, shrinking fear tried to rise in me. Fear, and something more. Something within me—is it you, Belamy?—that says I do not really want to kill.

Then Griswold came into sight,

and the familiar, hungry hatred made everything all right again.

I do not remember very much about the fight. It all seemed to happen within a single timeless interval, though I suppose it went on for quite a long while. It was a hard, fast, skillful fight. We both wore bulletproof clothing, but we were both wounded before we got close enough to try for each other's heads with steel. He favored a saber, which was longer than my machete. Still, it was an even battle. We had to fight fast, because the noise might draw other Hunters, if there were any in the Park tonight.

But in the end I killed him.

I took his head. The Moon was not yet clear of the high buildings on the other side of the Park and the night was young.

I summoned a taxi. Within minutes, I was back in my mansion, with my trophy. Before I would let the surgeons treat me, I saw to it that the head was taken to the laboratory for a quick treatment, a very quick preparation. And I sent out orders for a midnight Triumph.

While I lay on the table and the surgeons washed and dressed my wounds, the news was flashing through the city already. My servants were in Griswold's mansion, transferring his collections to my reception hall, setting up extra cases that would hold all

my trophies, all True Jonathan Hull's and all of Griswold's, too. I would be the most powerful man in New York, under such masters as old Murdoch and one or two more. All my age-group and the one above it would be wild with envy and hate. I thought of Lindman and Cowles and laughed with triumph.

I thought it was triumph — then.

I STAND now at the head of the staircase, looking down at the lights and the brilliance, the row upon row of trophies, my wives in all their jewels. Servants are moving to the great bronze doors to swing them ponderously open. What will be revealed? The throng of guests, the great Hunters coming to give homage to a greater Hunter? Or—suppose no one has come to my Triumph, after all?

The bronze doors are beginning to open. And I'm afraid. The fear that never leaves a Hunter, except in his last and greatest Triumph, is with me now. Suppose, while I stalked Griswold tonight, some other Hunter ambushed even bigger game—what if, for example, someone has taken old Murdoch's head? Then someone else would be having a Triumph in New York tonight, a greater Triumph than mine!

The fear is choking me. I've

failed. Some other Hunter has beaten me. I'm no good . . .

No. Listen. Listen to them shouting my name! Look, look at them pouring in through the opened doors, all the great Hunters and their jewel-flashing women, thronging in to fill the bright hall beneath me. I feared too soon. I was the only Hunter in the Park tonight, after all. So I have won, and this is my Triumph.

There's Lindman. There's Cowles. I can read their expressions very, very easily. They can't wait to get me alone tonight and challenge me to a duel in the Park.

They all raise their arms toward me in salute. They shout my name.

I beckon to a servant. He hands me the filled glass that is ready. Now I look down at the Hunters of New York—I look down from the height of my Triumph—and I raise my glass to them.

I drink.

Hunters, you cannot rob me now.

I shall stand proud in plastic, godlike in the eternal block that holds me, all passion spent, all fighting done, my glory assured forever.

The poison works quickly.

This is the real Triumph!

—C. L. MOORE &
HENRY KUTTNER



For Your Information

By WILLY LEY

SECOND TRIP TO VENUS

FOR some time now, I have been accumulating letters that could not be answered briefly, but which asked questions that I believe to be of general interest.

The first of these letters came from Donald Kingsbury of 2108 Maplewood Avenue, Montreal,

Canada, who offers this problem.

Let's assume that space travel engineering has progressed to the point where we can send an expedition to Venus along the orbit of minimum fuel expenditure, a so-called Hohmann A orbit. Supposing that this is the best we can do, for we cannot yet use a more expensive orbit, the problem is this:

How soon can a second expedition follow the first?

ALL right, let us 'see first how such a trip would be made. The Earth moves around the Sun with a velocity of 18.5 miles per second. This is exactly enough to counteract the Sun's gravitational force at the distance of 93 million miles. If a spaceship took off from the "forward" side of the Earth — which means at dawn — it would add its own velocity to that of the Earth and move "too fast" for the Sun to hold. As a result, the ship would drift outward in the Solar System, away from the Sun. But if the ship took off from the "back" of the Earth, at dusk, it would subtract its own velocity from the orbital velocity of the Earth and be "too slow" to maintain its position. It would drift inward in the Solar System.

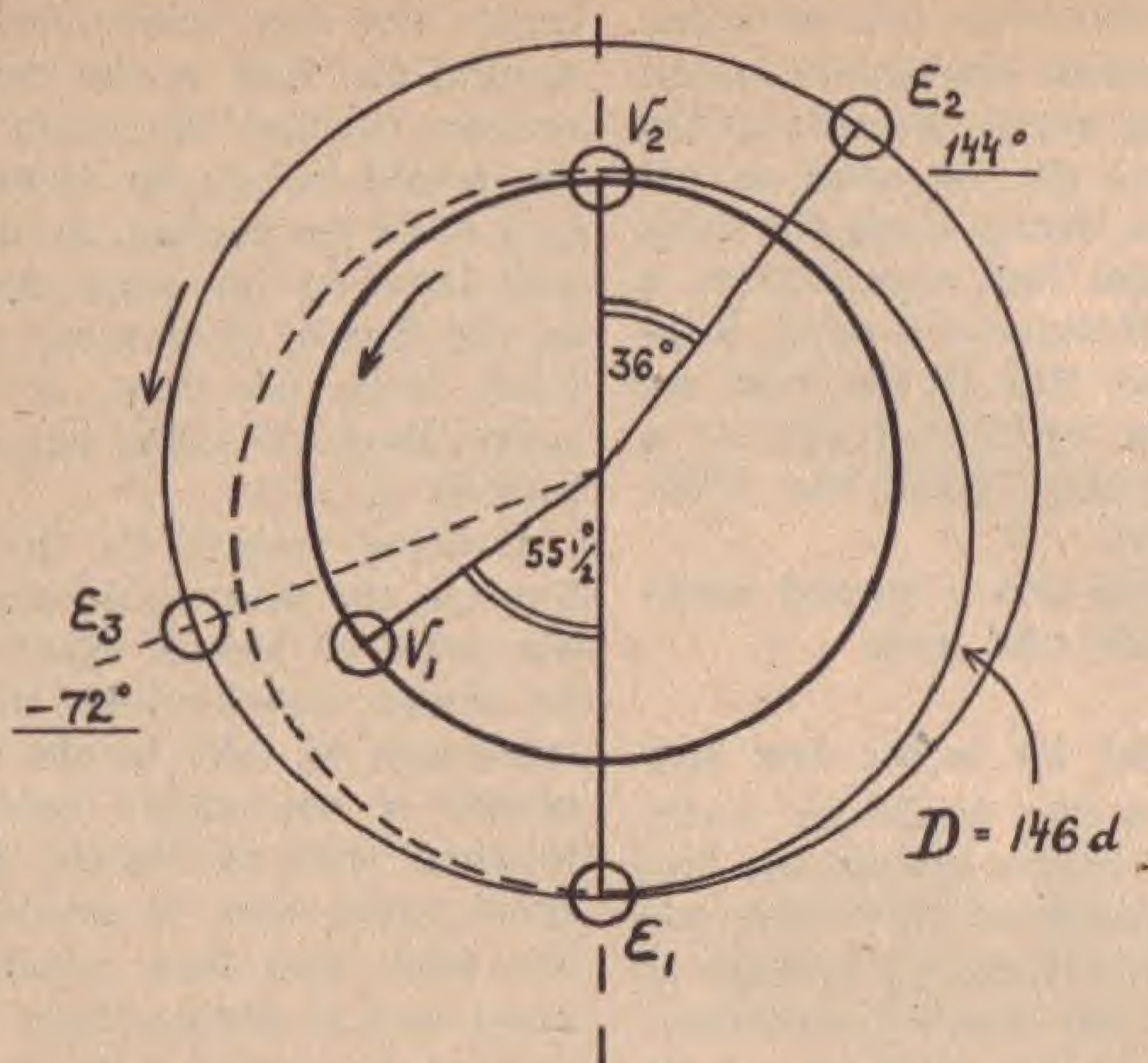
Don't be confused by the idea of taking off in the opposite direction of Earth's orbital move-

ment. The ship would still move around the Sun in the same direction, because the ship's velocity would be on the order of 8 or 9 miles per second, so it would still move in the same direction as the Earth, only more slowly. Seen from the Sun, it would make about 10 miles per second instead of 18.5.

Drifting inward in the Solar System, the ship would approach the orbit of Venus. Now it can be shown conclusively that the minimum of fuel would be required if the ship's orbit just touched that of Venus. If you spent more fuel, it would cross the orbit and then you'd need more fuel to correct this. If you wanted to spend still less, the ship would not quite reach its destination.

To travel from Earth to Venus along this most economical orbit would take 146 days. (See Diagram). In the course of these 146 days, the ship would traverse an angle of 180° as seen from the Sun. In other words, Earth at the moment of departure, the Sun, and Venus at the moment of arrival, must form a straight line.

BUT where must Venus be at departure time so that it will be in that straight-line position 146 days later? Venus, moving with an orbital velocity of 21.7 miles per second, needs 224 days



to go around the Sun once. This means that Venus moves $360^\circ / 224 \text{ d} = 1.607$ degrees per day. Earth moves $360^\circ / 365 \text{ d} = 0.987$ degrees per day. So while the ship describes an arc of 180° during the 146 days of the trip's duration, Earth describes an arc of $146 \text{ times } 0.987^\circ = 144^\circ$ and Venus $146 \text{ times } 1.607^\circ = 234.5^\circ$. Venus, during that time interval, moves $234.5 - 180 = 55.5^\circ$ more than the ship. Therefore the planet could be reached only if at the instant of departure Venus (V_1) is $55\frac{1}{2}$ degrees behind Earth (E_1). At the instant of arrival when Venus (V_2) is in the right

position, the more sedately moving Earth (E_2) is 36° behind Venus.

Supposing the ship somehow missed Venus, it would then drift back (dotted line in diagram) to the orbit of Earth, needing another 146 days for the trip back. It would arrive, after 292 days, where the Earth was 292 days ago — but unfortunately Earth needs 365 days (let's forget about those extra six hours) to get to the same spot so that it would still be 72° away (E_3). To arrive at Earth from Venus, Earth should not be 36° behind Venus, but 36° ahead of Venus.

Since Venus is faster than

Earth, the only thing one can do is to wait until Venus has caught up from behind. Venus is 36° ahead at arrival, but we want Venus to catch up so that it is 36° behind Earth. In other words, we want Venus to gain $360^\circ - 72^\circ = 288^\circ$. Per day, Venus gains $1.607^\circ - 0.987^\circ = 0.62^\circ$ or a little better than half a degree. To gain 288° consequently takes $288/0.62 = 464$ days, which is the waiting period until the expedition can return, reaching Earth after $146 + 464 + 146$ days.

The figures for a trip to Mars work out as $258 + 455 + 258$ days. Although the trip to Mars would take longer in itself, the waiting period happens to be a little shorter.

But how soon could a second expedition follow the first?

Well, obviously, the next time Venus is behind Earth by 55.5° , which simply means that, from one takeoff position to the next, we want Venus to gain a full circle or 360° . Which is $360/0.62 = 581$ days or a year and seven months.

The second expedition, then, would reach its goal almost precisely two years after the departure of the first.

LIKE everything unknown or supposed to be unknown, cosmic rays continue to excite

the imagination, and in my mail they run a close second to "flying saucers." Indeed, sometimes they seem to catch up with the saucers, which, considering the reported velocities involved, would be only natural. The letter that prompts me to write about cosmic rays at this time came from a lady (Joan Ellen Coan, 30 East 30th Street, N. Y. C.), who had been informed by somebody she politely fails to identify that "a person living near the equator is safer from the mysterious cosmic rays than a person in the arctic because he has more air over his head to protect him." The informant also added — I knew this was coming — that it would be impossible to protect a space crew against cosmic rays.

This takes some careful dissecting to straighten out, because the statement as quoted is a fine mixture of fancy with some fact hidden inside.

To begin with, there is little mystery about the nature of the cosmic rays. They are simply atomic nuclei traveling at high velocities. Most of them are the nuclei of light atoms, but there are occasional heavies.

What is "mysterious" is the source.

The very best available evidence indicates that the cosmic ray intensity does not vary with either the time of the day or with

the season. Day in and day out, all year round, you get very closely the same number. It *does* vary with the latitude because of the Earth's magnetic field. At the magnetic equator, the number is smallest; at the magnetic poles, it is highest, about ten times as large near the magnetic poles as near the magnetic equator.

What happens is that the magnetic lines of force deflect the incoming particles. It is just because of this deflection that we don't know where they originate, for the direction of travel near the ground where we catch them has absolutely nothing to do with the direction of their travel in space before they approached the Earth. Although we don't have enough material as yet to be sure, this deflection seems to take place at such heights that the 100-mile altitude of research rockets makes no difference.

The same force that obscures the origin of the cosmic rays is also responsible for their distribution. Over the magnetic poles, an incoming cosmic ray is virtually unopposed; over the magnetic equator, there is maximum deflection. You might say that the rays are admitted at the magnetic poles while those which appear elsewhere managed to climb the fence, said fence-climbing growing more difficult with

distance from the magnetic poles.

So this takes care of nature, origin and distribution.

NEXT we come to the problem of protection. It is generally assumed, and correctly so, that incredibly heavy armor or steel, lead or concrete would be needed to stop cosmic rays. From this fact, it is usually reasoned that one will have to find a satisfactory compromise between the weight of armor that can be carried and the amount of protection afforded by that armor. This reasoning, however, is fallacious. It isn't as simple as saying that 3-inch armor will stop 3-inch shells so that you have to worry only about heavier artillery.

When a cosmic ray hits matter — say, our atmosphere — it produces so-called secondary rays which are hardly better than the original rays or "primaries." So after having produced the "secondaries," "tertiaries," etc., etc., you still need enough mass behind or below to stop *all* of them.

Thin armor, then, instead of affording "some" protection, only serves as a source for secondaries without stopping the primaries.

Under these circumstances, it is easy to see why scientists who have investigated these problems have declared bluntly that "a little protection is far worse than none at all." It is like seeking

protection against revolver bullets behind several thicknesses of window pane. All you accomplish is to get the bullets and glass splinters.

Rocket engineers, naturally, are pleased by this. They much prefer to have a cabin wall as thin and as light as possible, just good enough to stay reliably pressurized. Now it turns out that this is best with regard to cosmic rays, too.

But granting that "partial protection" is worse than none at all, can we do *without* protection?

The answer is a clear yes.

We now know the cosmic ray intensity that will be encountered in space. We know how much exposure is permissible for an individual and the top authority in the field, Dr. Hermann J. Muller, has declared that an exposure time of 5 or 6 years would still be safe. The term "safety" refers, of course, to offspring that may be conceived after the exposure. But when it comes to people who do not intend to have additional children, the term "safe" must be used with reference to direct bodily harm.

And that stretches the exposure time very considerably. Quite likely, it is going to give a man far more years in space than he will care to spend out there.

AS with all other items in this month's column, this is also in response to a letter. A reader in Cleveland who does not wish to see his name in print wrote me a fairly long letter in which, after innumerable protestations of his devotion to astronomical knowledge, he finally got around to two points. One was a request to tell everything that is known about Jupiter's Red Spot. The other asked whether the Red Spot might be connected with the "flying saucers."

As for the question, the answer is no. I am unable to see any connection between a phenomenon in Jupiter's atmosphere and a set of phenomena of a different type in our own atmosphere.

But I'll be happy to oblige with the information requested.

Jupiter's Red Spot is precisely what the name indicates — a large red spot which can be seen in a good telescope and which shows quite conspicuously on photographs. It is south of Jupiter's equator — in astronomical telescopes and photographs, where the image is reversed, it shows above the equator — and is elliptical in shape. In location, it corresponds to Madagascar on Earth, 20° southern latitude, but in size it corresponds to 3½ times the area of the Pacific Ocean, for the Red Spot extends for about 30,000 miles east to west, and be-

tween 7,000 and 8,000 miles north to south. In color, the Red Spot was a decided brick red when strongest, but in the course of time it has been pinkish and even simply gray — one observer told me several decades ago that he had seen it as magenta when he was a young man.

In many books you can find the statement that the Red Spot was discovered in 1878. That is not quite correct. It merely became prominent and conspicuous in that year. But there is an unbroken series of observations for twenty years prior to that date, beginning with one in 1857. A historically minded astronomer, W. F. Denning, spent much time going through older astronomical records and found it on a drawing made by Schwabe on the 5th of September 1831. In fact, it is possible that the first detail ever seen on Jupiter's surface, a dark spot on Jupiter's southern hemisphere, discovered by Robert Hooke in 1664, was what we now call the Red Spot.

We know from our own experience since 1878 that the spot does not have to be red and that it can fade out. The latter might explain the lack of mention between 1664 and the 19th Century.

JUPITER, as you probably know, rotates astonishingly fast for a planet of its size, doing

so in a little less than ten hours. Consequently, Jupiter's disk is visibly flattened and streaked with cloud banks, indicating the presence of strong "trade winds." But since we cannot see Jupiter's surface, and since the clouds move with relation to the planet, you find a different rotational velocity if you look at different latitudes.

Near the north pole, you find 9 hours, 55 min. and 42 sec. Near the south pole, it is 9 hours, 55 min., 24 sec.

The southern "temperate current" moves within 9 hours, 55 min. and 5 sec., while its northern equivalent needs 9 hours, 55 min., 38 sec.

The equatorial belt takes 9 hours, 50 minutes and 30 sec., the red spot itself 9 hours, 55 min., and 38 seconds. Since it is largely in an area that requires 9 hours, 55 min. and 23 seconds, it moves slowly with respect to the neighboring cloud bands.

The fact that the rotational period of the spot was different from the period of the atmosphere surrounding it was eagerly seized upon for an explanation. Naturally, the explanations were made up against the background of the astronomical beliefs of the time, some sixty years ago.

Most astronomers were convinced then that Jupiter was still hot, possibly semi-molten, and

it was often thought that the four large moons of Jupiter might have a nice, pleasant climate. Even though they could not get much heat from the distant Sun, Jupiter itself probably made up for that.

Another belief that was still around then was the Kant-Laplace hypothesis of the formation of planets and moons. It said, in short, that a rapidly rotating Sun will throw off its equatorial bulge as a ring, which then condenses into a planet, and that a rapidly spinning planet makes its moons in the same manner.

HERE we had a massive planet, spinning exceptionally fast. Moreover, a planet with many moons and a planet which was still hot. Wasn't it logical to assume that Jupiter was giving birth to another moon? At any rate, a number of astronomers accepted this idea and they probably expected to see the Red Spot separating itself from the ball of the planet to take up a semi-independent existence as another of Jupiter's moons.

When that did not happen, the explanation was turned around. The difference in rotational motion might indicate that the Red Spot revealed the true motion of Jupiter's surface, hence the spot we saw was not the "event"

itself, but merely a reflection of something that had taken place down below.

Since the crust covering the fiery mass of the planet was probably very thin, it was easy to assume that a break had occurred which flooded an area of continental dimensions with lava. The cause for the break might have been purely local, a "geological" event, or else the break might have been caused by the crash of a minor planet or an unknown moon of Jupiter.

At least the second explanation had the advantage that it could be clearly visualized and understood. Unfortunately, as we know now, it cannot be true. Not that we consider a crash of a minor planetoid into Jupiter unlikely — that has probably happened quite often — but our ideas about Jupiter itself have changed greatly.

Being, in round figures, 86,600 miles in diameter, Jupiter occupies 1350 times as much volume as the Earth. But its weight is only 318 times as great. So there cannot be an atmosphere some 300 or 400 miles deep with a just-crusted-over lava core at the bottom of it. The planet simply does not weigh enough for that.

The present concept of Jupiter, for this and other reasons, is that its atmosphere, consisting mostly of hydrogen with some

methane and ammonia, is 30,000 miles deep, obviously with enormous pressures in its lower layers. Then follows what is called the Ice Mantle, some 10,000 miles thick, consisting of various "ices," frozen water, frozen ammonia, frozen methane. And only inside this ice mantle is there a rather small rocky and metallic core.

The Red Spot, then, must be an atmospheric phenomenon, located in the upper layers. We don't know what it is, because chemistry and meteorology for an atmosphere like Jupiter's are sciences which don't yet exist.

—WILLY LEY

ANY QUESTIONS?

What caused Gabriel Daniel Fahrenheit to place "zero" arbitrarily 32 degrees below freezing? There are 180 degrees between freezing and boiling by his scale. Does this have anything to do with the number of degrees in a semi-circle? How does F. compare with Celsius and centigrade?

Battell Loomis

201, 19th Street

Manhattan Beach, Calif.

Yes, Herr Fahrenheit of Danzig did act in an arbitrary manner when he placed his "zero" 32 degrees below the freezing point of water. But he had some justification for picking this particular temperature—it

was the coldest he could produce (by mixing snow and salt) on a cold winter's day.

The range of 180° F. between freezing and boiling has no reference to the 180 degrees of arc in a half-circle; this is probably accidental. The upper fixed point was not the boiling point of water, originally. Fahrenheit thought that the temperature of the blood of an adult would be best, for it was then believed that this was a constant, provided the man was healthy. According to some historians of science, he took the blood temperature to be 96°, while others say that 100° was intended. Both values miscarried, as we well know, for a man with a blood temperature of 100 is decidedly a "patient."

Even though, in Europe, centigrade degrees are called Celsius degrees—translators often slip up on this—there is a difference. It was the Swedish astronomer Prof. Anders Celsius who was the first to propose that the temperature interval between freezing and boiling of uncontaminated water under sea level pressure be divided into 100 degrees. But he wanted to call the boiling point "zero" and the freezing point "100" (or minus 100). On the centigrade scale which is now in use, zero is the freezing point and

100 the boiling point of water.

The Kelvin degrees—named after the British physicist William, Baron Kelvin — are the same as centigrade degrees, but counted from absolute zero (— 273.1 on the centigrade scale) to avoid having to fuss with minus degrees.

Fifty years ago, the English-speaking countries used the scale of the German Fahrenheit, the French, the Italians, Spaniards and others that of the Swede Celsius, but the Germans and Russians still clung to that of the Frenchman René Antoine Ferchault de Réaumur. On that scale, now fortunately extinct, zero was the freezing point of water, but the boiling point was 80 degrees.

A few months ago, I ran across the term googolplex which was described as

$$10^{10^{10}}$$

Is this same as 10^{100} ? I know that a googol is usually written as a one followed by 100 zeros.

Jay Olins

*17332 Sunburst St.
Northridge, Calif.*

Your last sentence is correct. A googol (of which its author, Dr. Edward Kasner, says that "it is not even approximately a Russian author") is a one followed by a hundred zeroes, in mathematical notation 10^{100} .

A googolplex is defined as a one followed by a googol zeroes, in mathematical notation

$$10^{10^{100}}$$

or if you want to lessen the probability of typographical errors and misreading

$$10^{(10^{100})}$$

Of course your figure

$$10^{(10^{10})}$$

is much larger than 10^{100} since that is only $10^{(10^2)}$. This number does not have a separate name, however.

Is uranium the heaviest element naturally occurring on Earth?

Jerry O'Neill

Silver Springs, Md.

From the way you use the term "heaviest element," it seems to me that you mean atomic weight rather than specific gravity. In either case, uranium is not the heaviest element naturally occurring on Earth — plutonium is.

The heaviest uranium isotope has a weight of 238. Plutonium has a weight of 239.

As for specific gravity or density, osmium is at the top of the list with a density of 22.5 times that of water. The density of uranium is 18.7. I don't know whether or not the density of plutonium has been officially released.

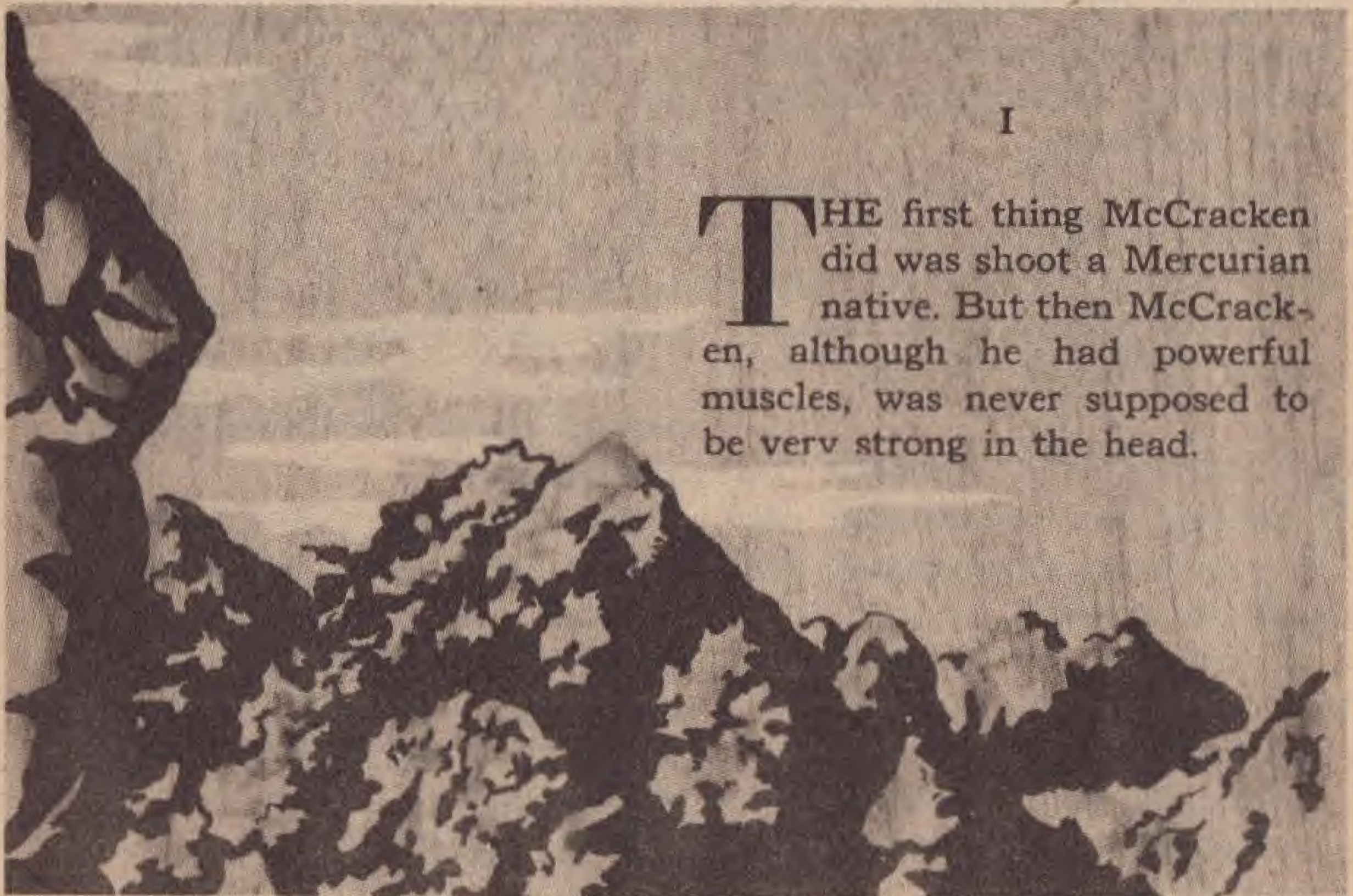


the Weather on Mercury

*Anyone mad enough (1) to land on that crazy
world (2) in order to rescue that screwball
explorer should (3) have his head examined!*

By WILLIAM MORRISON

Illustrated by VIDMER



I

THE first thing McCracken did was shoot a Mercurian native. But then McCracken, although he had powerful muscles, was never supposed to be very strong in the head.

The expedition was in the Twilight Zone, naturally, at the time. Without special clothing, which no one had, both the perpetual night of the Cold Side and the furnace heat of the Hot Side were out of the question. The Twilight Zone at this point was about forty miles wide, and the *Astrolight* had been skillfully brought down smack in the middle of it. Two hours after the landing, having ascertained that the air was as breathable as Kalinoff had reported, McCracken went out and aimed his explosive bullet at the Mercurian.

If it hadn't been for Carvalho, who accompanied him, the rest of the group would have known nothing of the incident. It was Carvalho who reported what had happened to Lamoureux, captain of the expedition.

McCracken, of course, burst into vigorous denials that he had shot a native. "You don't think I'd be fool enough to go around looking for trouble, do you?"

LAMOUREUX thought he would, but didn't say so. "You did shoot at something. We heard the report."

"I tried to hit a dangerous bird."

"What sort of bird was it?"

"Kind of like a penguin, I'd say, but with a broader face. No bill to speak of—"

"Then don't speak of it," snapped Lamoureux. "Did you score a hit?"

"I think the explosion caught it in the shoulder. It got away."

"Thank God for small favors," said Lamoureux. "That bird, you pigeon-brain, was a Mercurian. How do you expect intelligent inhabitants of other planets to look? Like you? They'd die of mortification."

"Damn it, how was I to know?"

"I told you not to shoot unless you were attacked." Lamoureux scowled. "Kalinoff is somewhere in the Twilight Zone and we were supposed to find him with the help of the Mercurians. It may interest you to know that, while you were out at target practice, some of them came around here and began to behave as if they wanted to be friendly. Then they suddenly disappeared. I imagine they got news of what you had done. A fat lot of help they'll give us now."

"We'll run across Kalinoff without them," said McCracken confidently.

Carvalho, who had a habit of looking for the dark side of every situation, and finding it, suggested, "Suppose the Mercurians attack us?"

McCracken said, "They haven't any weapons."

"How do you know?"

"Kalinoff didn't mention any."

Lamoureux emitted a laugh that sounded like an angry bark. "Kalinoff wouldn't know. *He* was friendly with them. He did report that they were an intelligent race. It'll be too bad if they use their intelligence against us."

McCracken thrust out his jaw. There was a streak of stubbornness in him, and he was not going to take too many dirty cracks lying down. He growled, "I think you're making a mountain out of an anthill."

"Molehill," corrected Lamoureux.

"Whatever it is. What if Kalinoff did say the Mercurians would help us? You can't take his word for it. Everybody knows what Kalinoff is."

Lamoureux frowned. "Kalinoff is a great man and a great explorer."

"They call him the interplanetary screwball."

"Not on this expedition, they don't, McCracken. You will please keep a civil tongue in your head."

"There's nothing wrong in what I'm saying. Kalinoff is a screwball, and you know it, Captain. He's always playing practical jokes. Look at how he got that Martian senator into the same cage with a moon-snake, and locked the door on him. The senator had a fit. How was he to know the snake was harmless?"

"You don't think Kalinoff would play jokes when his own life was at stake, do you?"

"Once a screwball," insisted McCracken firmly, "always a screwball."

Lamoureux lost patience. "Once an idiot, always an idiot. Get over to the ship and help with the unpacking. And remember, if we don't find Kalinoff, it'll be your fault, and God help you."

HAVING, he hoped, left McCracken feeling properly ashamed of himself, Lamoureux walked away. The responsibility was beginning to weigh him down. The other nineteen men in the expedition thought they were merely trying to rescue an intrepid explorer for the sake of human life, which was supposed to be sacred. They didn't know that, behind his screwball surface, Kalinoff was as shrewd as they came. He had made some valuable discoveries—and promptly staked out a claim to them.

He had run across large quantities of stable isotopes of metals whose atomic numbers ranged from 95 to 110. These had remarkable and useful properties.

They were, to begin with, of unusual value as catalysts in chemical reactions. For example, element 99, in the presence of air, was a more powerful oxidizing agent than platinum or palladium

was a reducing agent, in the presence of hydrogen. And the oxidations could be controlled beautifully, could be made to affect almost any part of a complicated organic molecule at a time. Element 99 was recoverable, and could be used again and again. A few hundred grams of it alone might very well pay for the cost of the entire expedition.

Add the value of a few kilos of elements 101 to 110, and Kalinoff had discovered enough to make him and a few other people rich for life.

Lamoureux wanted to be one of those other people. He had three kids he wanted to send through Lunar Tech; he had a wife with expensive tastes in robot servants; and he had relatives. Let him get Kalinoff off this God-forsaken planet, where he had been marooned for the past year, and even an interplanetary screwball might be expected to show some feeling of gratitude. Combine this feeling of gratitude with a reasonably fair contract already printed, and needing only the explorer's scrawl to give it validity, and Lamoureux could almost feel the money in his pocket. If only McCracken had not spoiled everything by his stupidity—

Lamoureux shuddered to think that by the time they got to him Kalinoff might be dead, and they would have to do business with

his heirs—heirs who had no sense of gratitude to impair their business judgment. He felt suddenly poor again. But he put the gloomy thought out of his head, and went on with his work.

UNPACKING would be finished in a couple of hours at most. Meanwhile there was some preliminary exploring to be done. The neighboring ground must be surveyed, and landmarks noted, so that they would have a suitable base from which to start their search. Kalinoff had talked about two mountains with a saddlelike ridge joining them. Those two mountains shouldn't be too difficult to recognize—if ever the expedition ran across them.

McCracken, obeying orders, was lending a hand at the unloading. What with Mercury's low gravity, and his own strength, he had no difficulty in wrestling around the five hundred pound crates in which their supplies had been packed. However, he was of little help in getting the work done. With what Lamoureux decided was characteristic stupidity, he seemed to be mostly in everyone else's way.

Lamoureux called, "McCracken!"

"Yes, sir."

"Let go those crates. The others will handle them. I want you—"

Lamoureux stopped suddenly.

A distant sound had come to his ears—the explosion of a bullet.

There was a sudden silence that was so absolute, Lamoureux could hear his men breathe. Another bullet exploded, then another—and silence again.

Somebody whispered, "The natives don't have guns. It must be Kalinoff!"

"What luck to find him this way!"

Lamoureux had run for his own gun. He fired ten shots into the air and waited. But there was no reply.

Lamoureux spat out his orders with machine-gun speed. "McCracken, you, Carvalho, and Haggard set out to the right. The shots seemed to be coming from that direction. But we'll take no chances. Gronski, Terrill and Cannoni, go straight ahead. Marsden and Blaine, to the left; Robinson and Sprott, to the rear. Spread out fast and keep your eyes peeled. Don't go any further away than the sound of a bullet. Uncover every damned white-bush, and tear up every desert-cat hill, but don't come back without Kalinoff. Now get going!"

THE men started on a run. Lamoureux, waiting impatiently, walked up and down in growing excitement. He had come prepared for a three months' search, expected it. He had pic-

tured himself and his men, exhausted by a long trek across the planet, coming upon the startled Kalinoff, striking a magnificent attitude, and saying, with characteristic Tellurian modesty, "Dr. Livingston, I presume." And, instead, he was going to find Kalinoff in less than a day. He ran into the ship, got out the printed contract, and read it hastily.

All was in order. He'd have Kalinoff's signature that day.

A half hour passed, and Lamoureux fired ten more shots. Haskell, the cook, was looking at the sky with a troubled expression on his face. He approached Lamoureux apologetically. "Say, Captain—"

"What is it, Haskell?"

"Does it ever rain on Mercury?"

"Never. No rain, no snow, no hail. No man who has ever set foot on the planet has come across any sort of bad weather. Kalinoff emphasizes that fact."

"Well, that's what I seemed to remember. But just now I thought I felt a drop of rain."

"Impossible, Haskell. Some bird—"

Lamoureux stopped abruptly. He, too, had thought he felt a drop of rain.

Haskell held out a hairy paw. "I thought I felt another one." His eyes fell on the brown rocks.

"Say, here's a big drop that splashed."

The brown rocks were being slowly spotted with black. And, as Lamoureux stared, he felt his head grow wet. There was no doubt about it. It was raining.

His mouth dropped open. "But it doesn't rain on Mercury!"

The sky was a dull gray now, and the patter of rain drowned out his words. He realized suddenly that he was becoming soaked.

Haskell was running for the ship. Lamoureux followed him and slammed the door shut. The men who had not been sent to search for Kalinoff were already inside. The rain rattled on the hull of the *Astrolight*, and on the parched ground.

Lamoureux stared through the side port and repeated blankly, "But it doesn't rain on Mercury!"

Fortunately, the noise of the rain was so loud that no one heard him say it.

II

IT was six hours before the first of the search parties Lamoureux had sent out returned. The men were soaked, but they had seen no trace of Kalinoff. They had faithfully tried to follow Lamoureux's directions, but in a downpour where it was impossible to see more than fifty feet

ahead of them, they stood little chance of rescuing anyone. Most of the six hours had been spent finding their own way home.

The other search parties drifted in slowly, until all had returned. Lamoureux checked them off one by one, and discovered, with practically no surprise, that McCracken was missing.

"Where is the idiot?" he growled.

"McCracken separated from the rest of us," replied Carvalho. "He thought he could catch a glimpse of those mountains Kalinoff described."

"When was this?"

"Just before it started to rain."

"He's probably within a few hundred yards of the ship right now, but can't find us because of this rain. I hope he has sense enough to dig up a white-bush and get some shelter."

"We can never be sure how much sense McCracken has. Anyway, Captain, it can't go on raining like this for very long."

But it could, and it did. The men sat around in the ship, stretching lazily, and took life easy. They had not had time to unpack many of the five hundred pound crates, and what materials were exposed to the rain would not be spoiled. There was no harm in leaving them where they were.

A vacation of this sort would

have been welcome, if the trip through space to Mercury had itself not been so largely a vacation. After a day, Lamoureux saw plainly that his men were sick of inactivity. So, for that matter, was he. He had come to take part in a strenuous and dangerous expedition, not to sit on his fanny waiting for the rain to go away.

Twenty-four hours after everyone else had returned to the ship, McCracken made a sensational reappearance. With that independence of thought that Lamoureux was beginning to recognize, he had found his own way of coping with the bad weather. He had stripped off his soggy and unpleasant clothing, and had meandered around for the past day clad in nothing but his shorts, with his rifle, his one remaining possession, held firmly in the crook of his right arm. The rain was fairly warm, and outside of giving him his usual ravenous appetite, his outing had done him no harm.

LAMOUREUX got one of the crew to dig up an extra suit of clothes to cover McCracken's manly beauty. "Where did you sleep?"

"I didn't."

"You wandered around all this time shocking the natives without rest?"

"I'm no sissy," grunted McCracken. "I'm not even tired."

He yawned, and caught himself. "I didn't see anything of Kalinoff. But I got a good look at those mountains he described. The pair with the saddleback ridge between them."

"Where are they?"

McCracken scratched his head. "I think I lost my sense of direction. But they're not far from here. No, sir, they're not far. Kalinoff is as good as found. The screwball."

His eyes closed while he was talking, and Lamoureux had him led to his bunk and deposited there. Two minutes later, McCracken's snoring was competing successfully with the noise of the rain.

There was little sense in looking for the mountains until the rain let up. Lamoureux waited, and waited in vain. The downpour kept on until its monotonous sound had become an integral part of their life. They learned to talk without paying any attention to it, and without even hearing it. But not without, now and then, cursing it.

After it had been raining for a week, Lamoureux noticed that the temperature was falling. It probably signified that on this part of the Twilight Zone the Sun was dropping further behind the horizon. As if he didn't already have troubles enough. He cursed Mercury; he cursed the Twilight

Zone; he cursed the rain; he even cursed the Sun. A few hours later, he also cursed the snow and the hail.

Such weather was absolutely incredible. There was nothing to explain it. As he had told Haskell, the cook, no previous explorer had ever seen a sign of rain, snow, or hail. Kalinoff had not reported such phenomena, and Kalinoff got around.

The men were going crazy with inactivity. Worst of all, to Lamoureux, was the way they looked at him. They seemed to feel that, as leader of the expedition, he was responsible for the weather. Lamoureux almost found himself agreeing with them.

ON the tenth day, he could stand it no longer. He called the men together and made a short speech. "Men, this rain seems able to go on forever. We can't stay here waiting for it to clear up."

Somebody cheered hopefully, and the others, for the sake of exercising their lungs, joined in.

Lamoureux held up his hand. "McCracken has reported that he saw the mountains we were looking for, with the saddleback ridge between them. Rain or no rain, we're going to find them."

Somebody yelled, "Three cheers for Big Muscles McCracken!" The three cheers were roar-

ed. Then there came, "Three cheers for our brave and heroic captain!" and, "Three cheers for the mountains!" and even, "Three cheers for the lousy rain and snow."

Lamoureux began to feel uncomfortable. This was too much like a high school football rally, with burlesque overtones, to suit him. The men were bursting with pent-up energy, and it had to get out somehow.

"I'm leaving only a half dozen of you behind to stay with the ship. The rest are coming with me. Any volunteers?"

He had expected what followed. They all volunteered. He made his choices rapidly. McCracken went along because he had actually seen the mountains. Carvalho would make an intelligent assistant. Gronski, Marsden, Sprott—he reeled off the names rapidly, and in less than a minute had his group, leaving a disgruntled half dozen who would have nothing to do but continue to sit around the ship.

Lamoureux himself carried a two-way radio transmission set capable of receiving intelligible signals over a distance of 12,000 miles. He gave another of the sets to McCracken, and ordered the man to hang on to it no matter what happened. In the rain, it would be their only way of maintaining communications with the

ship. He put McCracken and the radio in the second squad under Carvalho, and himself took charge of the first. The two squads would stick together unless some emergency demanded that they separate.

When they set out in the snow, wearing the heaviest clothing they had, the men were singing. McCracken's voice, like the croaking of a huge bullfrog, supplied an unharmonized but ear-filling bass. It sounded so impressive to Lamoureux that not until McCracken had reached the third song did he perceive that the man didn't know any of the melodies at all. He just oom-pahed as the spirit moved him, evidently feeling that, on Mercury, noise and good spirits were more important than any tune.

THEY had been marching for a half hour when Gronski exclaimed, "Well, I'll be damned to Venus and back!"

"What's wrong, Gronski?"

"It isn't snowing so hard, Captain."

It wasn't. Carvalho said hopefully, "Maybe it'll stop."

Sprott was so overwhelmed with delight that he scooped up a huge pile of snow, pressed it together, and popped McCracken on the nose with it. McCracken threw him down and poured snow down his back.

Lamoureux said angrily, "Stop that, you fools! You're not a bunch of kids."

The horseplay came to an abrupt halt. They marched on a little more soberly, and in a few minutes the snow had stopped falling altogether. Instead of being as happy as Lamoureux had expected, McCracken seemed puzzled. He scratched his head and scowled.

"What's wrong, McCracken? Termites?"

"It's this snow, Captain. We walk two or three miles and it stops. It don't make sense."

"It's got to stop sometime."

"The point is, Captain, it didn't snow here at all. There's none on the ground. It just snowed around the ship."

It cost Lamoureux an effort to admit it, but McCracken was right. He was not as stupid as he had seemed.

It was Lamoureux's turn to scowl. He got in touch with the ship. "Haskell!"

"Yes, sir?"

"How's the weather where you are?"

"Are you joking, Captain?"

"I'm serious, Haskell. Is it clear?"

"It's still snowing, Captain, just as it was less than an hour ago when you left."

Lamoureux grunted. "You may be interested to know that it

hasn't snowed here at all."

He cut off Haskell's astonished voice, and turned to the others, who now seemed a little uneasy. The unexpected changes in the weather were a little too much for them.

"Now that it's cleared up, we should be able to find that mountain. We'll spread out just a little, but not too far. For all we know, it may start to snow again. Carvalho, you take your group off to the left—"

Sprott whispered, "Captain!"

"Yes?"

"Isn't that a Mercurian?"

LAMOUREUX stared where Sprott had pointed. About a half mile away, a small gray creature, looking, as McCracken had reported, like a penguin, but with a broader face and no bill to speak of, was standing motionless.

"Sprott, you and Marsden go over to that thing. Be as friendly as you know how. Smile, grin, stand on your head if you have to, but don't scare it away. Try to induce it to follow you here. Maybe we'll finally get some of that information about Kalinoff we're looking for."

Sprott and Marsden were approaching the Mercurian cautiously. Several hundred yards away, they stopped and spread their arms in what was evidently

meant to be a gesture of good will.

The Mercurian remained motionless. Not until the men had come within thirty feet of it did it give a sign of life. Then it took a step toward them.

As Lamoureux watched, the two men spoke a few words. The Mercurian did not respond, but when they turned around and moved away, it followed slowly.

Seen from close at hand, the Mercurian did not so greatly resemble a penguin. To begin with, it had no wings, and no arms either. It lacked a bill altogether, but had instead a small mouth that seemed crammed with teeth. Its two eyes were slanted, which gave it an appearance of slyness. There were two round tufted ears. It moved forward not by waddling, but with a smooth roller-coaster gait that was the result of its moving its four legs forward one after the other.

Sprott reported, "It seems hurt."

There was, in fact, a grayish wound on the Mercurian's chest. Lamoureux didn't know enough about Mercurian physiology to hazard a guess as to what would be the best treatment; and, therefore, decided to leave well enough alone. But, according to Kalinoff, the Mercurians were intelligent. He wondered if the screwball explorer had taught this one any of

the Earth languages.

"Can you speak English?"

The Mercurian stared at him with its sly expression and said nothing.

"*Parlez-vous français? Sprechen sie Deutsch?*"

The men were grinning now, and Lamoureux felt his face growing warm. He must look like a fool, trying to carry on a conversation with a bird.

He asked, "Anybody here know Russian? Polish? Spanish?"

HIS men supplied him with phrases in the languages he asked for, but the Mercurian remained unresponsive.

McCracken ventured, "He don't look very bright to me, Captain. I can't understand why Kalinoff said they were intelligent."

"Maybe," suggested Sprott, "it's because they just stand there looking wise and don't say anything."

Lamoureux shook his head. "Kalinoff wouldn't be impressed by anybody's just looking wise. And he wouldn't be impressed by anybody's not saying anything. He didn't go for either stuffed shirts or strong silent men. That's why I believe that this thing must have a language of its own, and a fairly decent brain."

The Mercurian closed its two eyes slowly, like a sleepy cat, and opened them again. Then it pok-



ed one of its four feet out from under its body and scratched on the ground.

"He's nuts," decided McCracken. "Just scrabbling around."

"Hold it," ordered Lamoureux, "I'm beginning to get this."

The Mercurian had scratched nine parallel lines, only a few of them visible on the rocky ground. Now it scratched other lines, perpendicular to these.

Lamoureux barked, "A check-board! That's what it is! Has anybody got one?"

Marsden had a pocket chess set. He took it out. The Mercurian's eyes brightened. It sat down suddenly on the hard ground.

"I'll be damned," said Lamoureux. "He wants to play a game. Go ahead, Marsden. Entertain our guest."

The men were grinning again. Marsden squatted down on the ground and began to set up the men. The Mercurian stretched out two of its paws—three-fingered affairs, the fingers almost human—and seized one white chessman and one black. It hid the paws behind its back, then held them out again.

Marsden chose the white, and moved forward the queen's pawn. The Mercurian countered and the game was on.

It was Kalinoff who must have taught this creature the game, and, if it did nothing else, the

incident showed that the explorer was just as screwy as ever, and probably alive somewhere on the planet. Or did it merely show that he *had* been alive? Lamoureux, undecided, watched the curious battle of wits.

Half an hour later, Marsden, thoroughly beaten, demanded, "Who says this thing isn't intelligent?"

III

THE Mercurian was sitting up, wagging its head from side to side as if waiting for approbation. But Lamoureux, quite sure now that it wouldn't or couldn't talk, wouldn't have given a damn if it had beaten every champion on Earth. In addition, he was bothered by the fact that it was snowing again.

The flakes had just begun to fall, large and feathery, and Lamoureux himself soon had a powdered look. Most of the other men were still gathered around the Mercurian. But one of them, Sprott, came over to Lamoureux and glanced up at the sky as if puzzled.

"It's following us around, Captain."

"What is?"

"The snow, sir."

"Don't be silly, Sprott. We just happen to have run into a streak of bad weather."

Sprott went on stubbornly, "It looks funny to me. First it rains and snows for ten days around the ship. But it doesn't rain, or at least it doesn't snow, here. An hour after we get to this place, though, it starts coming down."

Lamoureux brushed some of the white flakes off his shoulders. "All right, Sprott, suppose you are right. It is following us around. That's no reason to alarm the other men, is it?"

"I guess not, sir . . . I won't say a word. But there's something else I wanted to speak to you about, sir. It's McCracken."

"You believe he's responsible for the snow?"

Sprott looked astonished. "I don't mean that, sir. I don't see how he could be."

"I do. He shot a Mercurian. I have an idea that they're the ones who are causing the peculiar weather we've been having."

"Why would they do that, sir?"

"Well, Kalinoff didn't mention seeing any weapons among them, so we've always assumed they had none. But suppose the weather was their weapon. It's a very effective one, Sprott. They've made things damnably unpleasant for us."

"How can they make rain where there isn't any, Captain? I know that rainmakers on Earth have had some success. But all they do is get the rain to fall near

where it would have fallen anyway. They may make it precipitate a few hours before it would have otherwise, but that's all. Here there weren't any clouds to start with."

Lamoureux admitted, "I don't know how the trick is done, Sprott. But I agree with you that the snow is following us around, and I'm sure that the trick is done."

SPROTT was silent a moment. Then he said, "And you think, sir, it's all because McCracken shot one of them?"

"They evidently believe in the principle of the rain falling on the just and unjust alike. And the same thing goes for the snow."

Sprott said doubtfully, "I'm not sure about that, sir. But I do know that McCracken is up to something. He's been getting some queer noises on his receiver."

"Such as Haskell singing lullabies from the ship?"

"Nothing as unpleasant as that, Captain. They're just a series of sounds, some a little longer than others. Da, da, da-a-a, da—that sort of thing."

Lamoureux asked, "When did you hear them?"

"About ten minutes ago. McCracken doesn't know anything about chess, and neither do I, so we both wandered away after the first ten minutes. McCracken said

he had an idea where those mountains were."

Lamoureux's eyes narrowed. "Those noises are undoubtedly a message. I seem to remember that some centuries back there was a code invented by a man named Morris. That's it, the Morris code. But where could such a message have come from?"

Sprott shook his head. "I couldn't say, sir. There's supposed to be no one but Kalinoff on Mercury, and his radio set doesn't work. Could the message have been sent from Earth?"

"Impossible, Sprott. That set will hardly get more than twelve thousand miles."

Sprott looked uncomfortable. "Then maybe what I heard wasn't a message at all, sir."

"I think it was. Does McCracken know you overheard him?"

"I don't think so, sir."

"Then don't let him know that we suspect anything wrong. Come to think of it, McCracken never seems to act quite as stupid as he pretends to be. I shouldn't be surprised if, when he shot that Mercurian, he understood very well what he was doing."

"You believe, sir, that he deliberately tried to cause trouble? Why would he do that?"

"I don't know," said Lamoureux slowly.

That wasn't the whole truth. He didn't know, but he certainly

could make a shrewd guess. All along, his chief reason for fearing delay on this expedition had been that Kalinoff might die before he could get to him. Now there was another reason for fearing delay. Suppose there were another expedition on the way to rescue Kalinoff. And suppose McCracken was secretly in the pay of the people behind that expedition, and doing everything possible to sabotage this one.

Lamoureux nodded to himself. That was probably it. The first thing, then, was to get the radio set from McCracken.

BIG Muscles, as the other men had nicknamed McCracken, was a few hundred feet away, staring off into the distance. What else he could see besides snow, Lamoureux couldn't guess. He yelled, "Hey, McCracken!"

"Coming, Captain."

McCracken took a few tentative steps, broke into a short run, and then made a leap that carried him seventy-five feet through the air, past where Lamoureux was standing. He ended up at attention, his hand raised in a military salute.

Lamoureux frowned. Knowing what he did about McCracken, this attempt to seem carefree, childish, and perhaps a little stupid impressed him unfavorably. He said, "McCracken, I'm taking

you out of Carvalho's group and putting you into my own. I may need some strong-arm work and you're just the man for it."

"I sure am, Captain."

"Seeing as I already have a radio, you may as well turn yours over to Carvalho."

McCracken seemed a trifle less eager. "It's rather heavy, Captain. If you'd like, I'd carry it for you just the same."

"I prefer to have my own where I can get at it whenever the need arises. Turn yours over to Carvalho, McCracken."

"Yes, sir. Meanwhile, I want to report, sir, that from where I was standing when you called to me, I think I could see those mountains."

Lamoureux had his doubts, but he kept them to himself. "Good," he said briefly. "We'll get going."

He called the men together again and gave them their marching orders. Whether the Mercurian understood what he said, Lamoureux didn't know. At any rate, it went along willingly.

They reached the place where McCracken had been standing, and Lamoureux stared where Big Muscles pointed. There were two mountains rising off in the distance, barely visible through the snow, and there was certainly a saddleback ridge between them. The only trouble was that one of the mountains was almost

twice the height of the other. Kalinoff had reported them as approximately the same height.

"That doesn't fit Kalinoff's description."

McCracken said, "Maybe he looked at them from a different angle, sir. Then they might have seemed the same height."

"If he looked at them from a different angle, the ridge would no longer seem saddlebacked."

"That's true, sir. But then you know, sir, Kalinoff is a screwball—"

Lamoureux found this a little hard to take from a man he suspected of quietly trying to stab him in the back. But he continued to hide his feelings. "That's as may be, McCracken, but he's not cockeyed. These aren't the mountains he described. Still, we may as well approach them. We may be able to get a good view from the top of the taller one."

THEY moved onward again. A quarter of an hour's marching took them to the edge of the falling snow. As they walked further, the air became completely clear, and Lamoureux could see the mountains without straining his eyes. There was no doubt about it. They were *not* the mountains Kalinoff had described.

The Mercurian horizon was not so far away as the more familiar horizon of Earth, and it was



a little difficult for Lamoureux to estimate distances. Still, the foothills of the mountains could not be more than twenty miles away. For the past day, little more than the rim of the Sun had been visible above the horizon, and while the peaks were ablaze with scarlet and golden colors, only the higher one was out of the shadow to any considerable extent. The saddlebacked ridge itself was a vague outline of dull black.

The snow did not catch up with them until four or five hours later, when they stopped to prepare a meal and rest. Then it began to fall gently after they had been in the same place for three-quarters of an hour. By now, Lamoureux was sure that it was the Mercurians who were to blame. He still wondered how they did it.

The one they had come across had remained with them, and Lamoureux found it harder than ever to regard the creature as intelligent. All the thing had done was walk and play chess. Lamoureux had a low opinion of chess players, even when they were fairly human. He had an even lower opinion of trained animals. This Mercurian fell, in his estimation, somewhere between.

They were no more than a mile or two from the foothills of the larger mountain by now, and the saddlebacked ridge loomed sev-

eral hundred feet into the air. Unfortunately, the snow was between it and them, and prevented them from gaining too clear a view. Lamoureux wondered if the snow would keep up even at the top of the mountain, and damned McCracken again for shooting that Mercurian. And then he discovered that McCracken's feats of arms were not yet ended. McCracken was at that very moment aiming at some target that Lamoureux could not see.

Lamoureux sprang to his feet. "Don't shoot, you fool!"

He was a little too late. The noise of the explosion rang out. McCracken said, "Sorry, sir, I didn't hear you until my finger had already squeezed the trigger. But I wasn't trying to hit anything that was alive. There was something that looked like a rock on that ridge—"

The words died away in his throat. Lamoureux lifted his eyes and saw something hovering in front of them, high in the air. It had eyes and a mouth and, from these features, he knew that it was a huge head, as large as a fair-sized house. There was a long, interminable stretch of neck behind it, and somewhere in the rear he felt sure was a monstrous body. But he wasted no time searching for that.

The eyes were staring at the men unblinkingly. These eyes

alone were bigger than the men were. Then the neck stretched out and the head came poking down.

LAMOUREUX turned and ran. It had been years since he had done much physical exercise, but he made up for them now. Then, too, as the captain of the expedition, he felt that the men might expect a certain amount of leadership from him; it was with some dismay that he discovered that all the rest were ahead of him. Picking up speed, he passed Sprott, then Marsden, and then Gronski. Ahead of him someone stumbled, and Lamoureux wasted a precious second helping the man to his feet.

The huge head opened, and a roar that almost knocked out his eardrums vibrated through Lamoureux's body. The ground shook under him. That meant that the whole creature, whatever it was, was coming after them. Gronski and Sprott passed him as if someone had stuck a needle into them, and Lamoureux, sobbing for breath, tripped over a rock and plunged headlong.

The ground beside him trembled as if it were being rocked by a series of quakes. A deep shadow fell over him, and Lamoureux tried to dig his prone body into the ground and not breathe. From far ahead, a scream of terror split the air.

Then the quakes and the shadow had passed, and Lamoureux dared to lift his head. Far ahead, he could make out the gigantic neck stretching into the air, its outline already vague through the falling snow. A few feet away from him lay Gronski, and a little further on McCracken.

None of the other men were in sight.

The valiant McCracken, his rifle still clutched to him, was aiming at the vanishing figure. Lamoureux said, "Don't bother, McCracken. You've already done enough harm."

"I just thought I'd get a shot at him, sir, while he was excited. He wouldn't know where it came from."

"He knew the first time. Don't bother, I say. You can't hurt him, and he can do plenty to you."

"All right, Captain."

Lamoureux brushed some of the snow off him and tried to catch his breath. "McCracken, if you're really anxious to play with your gun, you may fire into the air. Five times."

"Yes, sir."

McCracken fired, and they waited. Lamoureux said, "I hope nobody was hurt. I don't think any of them, if they're alive, are too far away to hear those shots. We'll wait for them to assemble here and then start out for those mountains again."

"Yes, sir. Except, Captain, that it may be a little difficult—"

"What'll be difficult?"

"Finding those mountains. They just don't look the same."

Lamoureux stared. The mountains stretched into the air exactly the same as before, the same scarlet and gold colors glowing on their peaks, the same shadows on their sides. But the saddle-backed ridge between them—

Lamoureux looked again. The entire ridge was gone.

IV

THE snow fell as steadily as ever while Lamoureux waited for the men to assemble. Only two were missing now—Terrill and Carvalho. McCracken had fired again and again into the air, but these two had not returned.

Lamoureux decided finally, "It looks as if they're not coming. Gronski, you take over for Carvalho. You'll stay here in charge of his group while the rest of us climb the mountain."

McCracken said, "You want me to come with you, don't you, Captain?"

"I certainly do. I'm curious to know what in hell way of ruining this expedition you'll think of next."

"Aw, now, Captain, that isn't fair. How was I to know that whole ridge was one big animal?

You wouldn't have believed it yourself. Something over five hundred feet high, with a neck even longer. We're not used to them that big on Earth. Here the gravity's less, so it's okay. But even Kalinoff—"

"Don't talk to me about Kalinoff," said Lamoureux fiercely. "He's as bad as you. That screw-ball!"

"We're still trying to find him, aren't we, Captain?"

"Sure, we're trying to find him, but how can we expect to do it?" Was it his imagination, or did McCracken seem pleased? Lamoureux didn't care. He went on, very bitterly, "He starts off by telling us that the Mercurians are intelligent. You saw how intelligent they were. Where's that specimen we had?"

"He got lost in the shuffle," reported Gronski.

"It's just as well. Kalinoff tells us of a landmark—two mountains with a saddlebacked ridge between them. The ridge runs away, and our landmark isn't a landmark any more. Then there's the weather—no rain, no hail, no snow. Nothing but pure fresh air and nice clean sunshine." He kicked at a snowdrift. "What's this thing supposed to be, a mirage?"

McCracken said, "I know how you feel, Captain. But about this mountain now—do you really

think we ought to climb it?"

"Why not?"

"You can't see the top from here on account of the snow. It's coming down in bigger flakes than ever now. That means you can't see here from the top. And as the only reason we want to climb it is to take a look around—"

"We'll climb it anyway. Maybe it isn't snowing as hard on the other side."

THEY started off then, with Lamoureux barely keeping a tight enough grip on his feelings to prevent his talking to himself. The mountain was steep, but the gravity here being low, it was easy enough to climb. McCracken demonstrated how easy it was by running up it full speed. Lamoureux let him go, hoping that he would break his neck, but McCracken's luck was too good. All he did was start a gentle landslide that almost buried everybody else.

As they rose, they got more and more of the Sun's rays and the temperature went up slightly. The snow turned to rain, drenching them to the skin, and they climbed all the faster, anxious to get the job over with.

At the top, the rain had died down to a faint drizzle. Lamoureux, looking off into the distance, could see as through a veil a range of sky-piercing moun-

tains, their peaks gleaming in the Sun, their roots cleft with deep shadowed valleys. Between almost every pair of mountains was a saddlebacked ridge.

"Landmarks," commented Lamoureux sourly. "To hell with them."

"I told you it would be a waste of time, Captain."

"Not in the least, McCracken. After all, you *might* have broken your neck."

They started down again, and in a half hour were back at the line where the rain changed to snow. Another hour took them to Gronski again.

Lamoureux shook his head. "No sign of Kalinoff."

"What do we do now?"

"We go back to the ship and carry on from there. I don't know what steps we'll take after that, but at least we'll get back to shelter, out of this snow."

"Which way is the ship?"

"That," said Lamoureux, "is one question we can find the answer to." He spoke into his radio. "Haskell!"

Haskell was alert. "Yes, Captain."

"Keep your radio beam going. We're depending on it for direction."

"Sure, Captain."

Lamoureux snapped off the sending set. "Now let's get moving, before we freeze to death."

The return trip was a slow one. Their spirits were all low, even McCracken's. Lamoureux pictured the return to Earth, the eager, and then disappointed, reception, and the wave of ridicule that would follow their account of the difficulties they had encountered.

They stopped once to eat. Lamoureux estimated that they had supplies for another two and a half months left in the ship, not counting what would be needed for the return journey. They might as well stay here until those supplies were used up. They might possibly find Kalinoff during those two and a half months, although, with the Twilight Zone of the whole planet to look in, and no decent clues, not to mention the difficulties caused by the snow, the chances were none too bright. Nevertheless, they would have to do their best.

The meal came to an end, and they started off again. They had gone only a few hundred yards, when Lamoureux noticed something wrong.

"Haskell!"

There was no reply. Haskell's radio beam had been shut off.

THIS was a little too much. Lamoureux let loose a streak of profanity that had even McCracken staring at him in awe. Then they started out again, try-

ing, through the falling snow, and over the rocky ground, to keep in as straight a line as possible toward the ship. Lamoureux managed to sustain his spirits only by thinking of what he would do to his cook.

Two hours later, he had an opportunity to put his plan into practice. For out of the snow there emerged Haskell, and the men who had been left with him at the ship. Haskell started to run toward Lamoureux the moment he caught sight of the other group.

"Here we are, Captain! We came as fast as we could!"

Lamoureux's eyes were almost as cold as the snow. "How thoughtful of you."

"Who else is hurt, Captain?"

"Nobody's hurt, but somebody is going to be."

Haskell looked surprised. "I don't get it. You told me to come as fast as I could, and you said that eight of the men were badly injured."

"I told you?"

"Yes, sir. I thought you were hurt yourself, sir. Your voice sounded hoarse."

Lamoureux's jaws were clenched together so tightly in his effort to maintain his self-control that his teeth hurt. He unclenched them. "I don't quite understand you, Haskell. My voice is as melodious as ever. Something else

is strange, too. You ask who else is hurt."

"Yes, sir. We ran across Terrill a little while ago. He got brushed by the tail of some animal and was walking around in a real daze."

"How do you suppose we're walking? At any rate, I'm glad you found him. See any signs of Carvalho?"

"No, sir. We left the radio beam on to guide you—"

"What's that? You're sure you left it on?"

"Positive, sir."

"Well, someone has turned it off! Someone—Oh, my God!"

It was so damn simple, and he had never even thought of it. Carvalho was the man. Carvalho was shrewd and quiet, a man who could keep his intentions to himself and wreck an expedition without so much as being suspected. Subconsciously, Lamoureux hadn't quite believed in McCracken's guilt, despite the seeming evidence against him. McCracken had too genuine a love of horseplay, and of childish showing off.

These things were hard to pretend. You didn't put snow down somebody's back when you were plotting to leave him marooned on a deserted planet. And you didn't impress people by making a seventy-five foot broad jump when you could impress them

much more effectively by condemning them to slow death.

ONCE he had thought of it, Lamoureux couldn't doubt. Carvalho had turned off the radio beam at the ship. By now the *Astrolight* was probably somewhere in space, possibly proceeding to some rendezvous with a rival expedition. Carvalho wouldn't dare appear back on Earth as the lone passenger returning on Lamoureux's ship. But he wouldn't have to. He could set the *Astrolight* adrift, be "rescued" by the people who had employed him, and come back to tell of the dangers he had braved on Mercury.

It all fitted in. Carvalho had been the one who had tried to hamper their work from the moment they had landed. When McCracken had shot that Mercurian—

Lamoureux asked, "What happened then? Try to remember."

McCracken scratched his head vigorously. "I think Carvalho saw this Mercurian and started to yell and run. I thought he was scared. That's why I shot."

So Carvalho had really been responsible for the shooting. Lamoureux asked, "Why didn't you report that Carvalho started to yell and run?"

"Well, Captain, you don't expect me to go around telling you

things like that about another guy?"

The words, "You fool," had been on Lamoureux's lips, but he bit them back. After all, who had been the bigger fool, McCracken or he himself, who had insisted that Carvalho get the radio? There was no doubt about the answer to that one.

As for the occasion when the radio had begun to emit its mysterious code signals, the explanation for that was simple enough, too. The people who were in contact with Carvalho had sent their messages, not knowing whether strangers might be listening in, but not caring either. No one could make head or tail of the mysterious sounds but Carvalho. McCracken had, in fact, considered the noises a new strange form of static that had interefered when he tried to talk to Haskell.

Lamoureux felt like asking McCracken to kick him in the pants. As that would have been bad for discipline, he substituted an order to get started back toward the ship. There was the faintest of chances that Carvalho had delayed, or had been forced by some accident to delay, his departure back to Earth.

It was snowing harder than ever now, and it was difficult for Lamoureux to see more than fifty feet ahead of him. The rim of the Sun was blotted out so thor-

oughly that it was almost as dark as on a moonless night. Nevertheless he pressed on doggedly.

It was not until six hours later, after he and the men had been wandering around aimlessly for a long enough time to have reached the ship and returned, that he admitted to himself that they were lost.

V

NOT that it mattered a great deal. Lamoureux realized perfectly well that by this time the *Astrolight* was on its return journey to Earth. All the same, it was disheartening to know that he was so completely unable to find his way about on this planet.

The question now was what to do. They had little enough food, and not too much in the way of other supplies. They would have to live off the planet until some kind of rescue expedition had been organized to save *them*. If Kalinoff had done it, they could, too. Lamoureux's face burned as he pictured himself striding over to Kalinoff, staring at the man solemnly, and uttering those historic words, "Dr. Livingston, I presume." That was one scene that would never take place.

It was growing colder by the hour. That meant that they would have to move over toward the Hot Side before the Sun sank

beneath the horizon altogether.

McCracken, the most cheerful of the lot, had a glum face as he asked, "What do we do now, Captain?"

"First we eat, McCracken. Then we move toward the Sun. Just one word, McCracken. You like to shoot?"

"Yes, sir."

"Save your bullets. I have an idea we're going to need them before this little adventure of ours is finished."

Then Lamoureux sat down on a snowy rock, leaned back, and thought everything over. It was improbable now that any of his kids would ever get to Lunar Tech. Well, that wasn't anything to be sorry about. The life of ease and luxury of the place had ruined more than one promising youngster. His wife would have to get along with a single robot. It would do her good to wait on the family for a change. As for his relatives—to hell with them. Let them find somebody else to sponge on.

He was busy with these cheerful reflections when he heard McCracken shout, "Hey!"

A figure loomed out of the snow ahead.

The figure paused and stared at Lamoureux.

McCracken yelled, "Hey, Captain!"

The figure came forward, bow-

ed, and showed its teeth. "Mr. Stanley, I presume?"

LOOKING back at it later, Lamoureux decided that this was the most mortifying moment of his life. He had been sent to save Kalinoff.

Instead, Kalinoff had saved him.

It was the screwball explorer, of course. Lamoureux recognized him at once. Kalinoff was a shrimp, a fraction of an inch below five feet in height, and he had a face like a monkey's. Having taken a good look at him, Lamoureux felt, "My God, is this what we've been trying to rescue?"

Kalinoff was not alone. He was accompanied by a pair of penguin-like Mercurians, who looked just as sly and acted with as little intelligence as the one they had previously encountered. Lamoureux had no idea how Kalinoff had managed to get along with them.

Kalinoff, it seemed, was angry. "Why in hell," he demanded, "didn't you have sense enough to return to the ship?"

Lamoureux stared.

"You mean the *Astrolight* is still here?"

"Of course it's here. And the radio beam is on."

"You're sure—the beam is on?"

"Of all the nitwits to let loose

on an unfriendly planet, you're about the worst. I've just told you it's on, haven't I? It's been on for the past two hours."

Lamoureux swallowed hard. "And Carvalho?"

"There's a man who I assume is Carvalho. He's tied up. I've got a couple of friends watching him to make sure he doesn't get away."

"Friends?"

"Like these." Kalinoff indicated the Mercurians. "Come on. I'd like to get back to Earth. There's a girl I've got to see."

"But who—what happened to Carvalho?"

"He seemed anxious to leave, so I pushed my fist down his throat. Incidentally, there was a radio going, with a code message."

"Short distance radio?"

"Interplanetary. The ship's hull acted as a receiver, naturally. You could get the message anywhere on the planet by arranging a short distance automatic rebroadcast."

"So that's what Carvalho did."

"If I'm late this time," said Kalinoff worriedly, "she and I are finished. She's willing to put up with dates six months in advance, but there's a limit, and I've been late too often. And she's too nice to lose. Get a move on, quick."

Lamoureux, in a daze, com-

plied. They were only an hour's journey from the ship, and, under Kalinoff's urging, they made it in forty minutes. Carvalho, looking terrified of the two Mercurians who were standing over him with their teeth showing, yelled, "Help!"

"Never mind him," Kalinoff ordered. "Hop into the ship."

"But what are we going to do with him?"

"Well, what's he been up to?"

LAMOUREUX explained briefly, and Kalinoff grunted. "You fellows are a bunch of screwballs, setting out on an expedition like this without proper equipment and proper information about Mercury." At the word "screwballs," Lamoureux winced, but remained silent. Maybe it was deserved. Kalinoff went on, "As for Carvalho, that's simple. Leave him behind. He intended to maroon you, didn't he? Maroon him instead. But first let him send one interplanetary radio message to his friends."

"In code? We won't know what it is!"

Kalinoff grinned. "We'll leave his punishment up to him. Suppose he reports you've found me. Then his pals won't come for him, and he's going to stay here indefinitely."

"What if he reports you *haven't* been found?"

"Then they come for him, discover he's a liar, and there's hell to pay. Either way, he's in for a lousy time."

"They'll murder him."

"Oh, no. We'll let them know that we're reporting the facts of the case to the Interplanetary Commission. They'd never dare commit murder."

Lamoureux objected doubtfully, "Wouldn't the Mercurians kill him?"

"If he treats them right, they'll treat him right. They're not as intelligent as I thought at first—maybe you've discovered that—but they have their points."

"They're wonderful chess players."

"Fair," said Kalinoff critically. "Only fair. I always beat them, but then, naturally, I'm very good. Maybe that's why they admire me. They have great mathematical abilities, and they can visualize well, but their language is primitive and in some ways they're halfwits. There have been plenty of mathematical prodigies on Earth just like them—wonders at calculating, and fools at everything else. To hell with them. Let's get started."

"Wait a minute, Kalinoff. What about those huge beasts? Won't they be dangerous to Carvalho?"

"Oh, them." Kalinoff chuckled. "I certainly gave you some off-beam instructions before that

radio of mine went on the blink. I really thought at first that those two mountains I described with the saddlebacked ridge between them would make a good landmark. Two days afterward, I discovered that the ridges were living creatures. The things have a habit of sheltering themselves from the Sun between a pair of mountains. They wrap their necks around their bodies, tuck their heads beside them, and you'd never know they were alive. They don't move for days at a time."

"But when they do move—"

"Leave them alone, and they leave you alone."

THE Captain asked, "What about the rain and snow?"

"I may as well clear this up once and for all. The rain and snow were my doing. After I had told you to rely on the Mercurians and described the landmark, I discovered that the Mercurians were nitwits and the landmark a false alarm. That meant that, once you landed, you'd never find me except by accident. That put it up to me to find you."

"As you may have heard, normally there's no such thing as rain or snow on Mercury. But there is water. And there is a continual process of transfer going on. The water flows through subterranean channels to the Hot Side, evaporates, and is carried

over in the air to the Cold Side. There it deposits on the ground eventually as ice, melts, and goes through the whole process again."

"Why doesn't it rain?"

"Because there's no dust in Mercury's air. The absence of a rapidly alternating day and night means that the air doesn't circulate on the same scale as on Earth. Practically no wind, combined with little erosion, means little dust. The water-laden air cools off and becomes super-saturated at the Twilight Zone. But there are no clouds, and there's no precipitation because the water needs either dust or ions to condense on. In a Wilson cloud chamber, an experimenter furnishes it with ions. Here on Mercury I furnished it with dust.

"I gave the Mercurians rifles and explosive bullets, and taught them to shoot into the air. It was quite a job, but they learned. The explosion spreads a cloud of dust, the water condenses, and you have rain or snow, depending on the temperature. I impressed it upon their brains, such as they are, that the presence of human beings calls for a Fourth of July celebration—shooting into the air.

And there you are. I had the occurrence of rain and snow reported to me, moved toward wherever the snow was thickest, and found the ship."

"Another thing—"

"I've talked enough. That dame won't wait forever. Which will it be, Carvalho, the Lady or the Tiger?"

They listened in curiosity as Carvalho, tight-lipped, tapped out a short message in code. They didn't ask him what it was.

As the *Astrolight* drove upward away from Mercury, Lamoureux had one last glimpse of the Mercurians shooting into the air. The snow was coming down in enormous flakes two inches across, and Carvalho, staring after the ship, was shivering and cursing. After they reported the facts to the Interplanetary Commission, a ship would be sent to pick him up—but it might take some time.

"Let me tell you about this dame," said Kalinoff.

Lamoureux listened patiently, got out his contract, and waited, with pen ready, for the interplanetary screwball's signature.

—WILLIAM MORRISON

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A BAD DAY FOR SALES

By FRITZ LEIBER

*Don't wait to "Get 'em while
they're hot." By then, it is
too late to get them at all!*

Illustrated by EMSH

THE big bright doors of the office building parted with a pneumatic *whoosh* and Robie glided onto Times Square. The crowd that had been watching the fifty-foot-tall girl on the clothing billboard get dressed, or reading the latest news about the Hot Truce scrawl itself in yard-high script, hurried to look.

Robie was still a novelty. Robie was fun. For a little while yet, he could steal the show. But the attention did not make Robie proud. He had no more emotions

than the pink plastic giantess, who dressed and undressed endlessly whether there was a crowd or the street was empty, and who never once blinked her blue mechanical eyes. But she merely drew business while Robie went out after it.

For Robie was the logical conclusion of the development of vending machines. All the earlier ones had stood in one place, on a floor or hanging on a wall, and blankly delivered merchandise in return for coins, whereas Robie searched for customers. He was

the demonstration model of a line of sales robots to be manufactured by Shuler Vending Machines, provided the public invested enough in stocks to give the company capital to go into mass production.

The publicity Robie drew stimulated investments handsomely. It was amusing to see the TV and newspaper coverage of Robie selling, but not a fraction as much fun as being approached personally by him. Those who were usually bought anywhere from one to five hundred shares, if they had any money and foresight enough to see that sales robots would eventually be on every street and highway in the country.

ROBIE radared the crowd, found that it surrounded him solidly, and stopped. With a carefully built-in sense of timing, he waited for the tension and expectation to mount before he began talking.

"Say, Ma, he doesn't look like a robot at all," a child said. "He looks like a turtle."

Which was not completely inaccurate. The lower part of Robie's body was a metal hemisphere hemmed with sponge rubber and not quite touching the sidewalk. The upper was a metal box with black holes in it. The box could swivel and duck.

A chromium-bright hoopskirt with a turret on top.

"Reminds me too much of the Little Joe Paratanks," a legless veteran of the Persian War muttered, and rapidly rolled himself away on wheels rather like Robie's.

His departure made it easier for some of those who knew about Robie to open a path in the crowd. Robie headed straight for the gap. The crowd whooped.

Robie glided very slowly down the path, deftly jogging aside whenever he got too close to ankles in skylon or sockassins. The rubber buffer on his hoopskirt was merely an added safeguard.

The boy who had called Robie a turtle jumped in the middle of the path and stood his ground, grinning foxily.

Robie stopped two feet short of him. The turret ducked. The crowd got quiet.

"Hello, youngster," Robie said in a voice that was smooth as that of a TV star, and was, in fact, a recording of one.

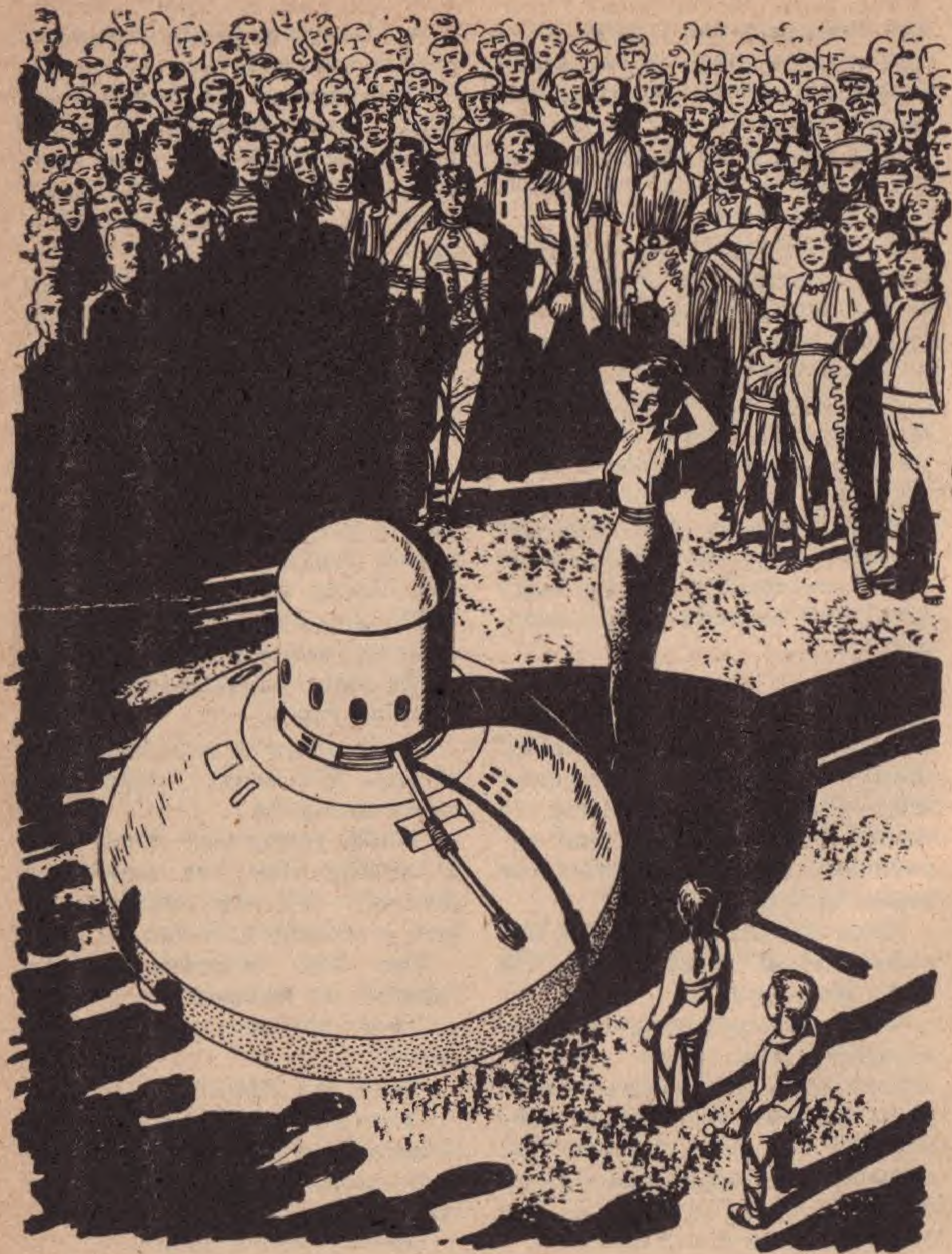
The boy stopped smiling. "Hello," he whispered.

"How old are you?" Robie asked.

"Nine. No, eight."

"That's nice," Robie observed. A metal arm shot down from his neck, stopped just short of the boy.

The boy jerked back.



"For you," Robie said.

The boy gingerly took the red polly-lop from the neatly fashioned blunt metal claws, and began to unwrap it.

"Nothing to say?" asked Robie.

"Uh—thank you."

After a suitable pause, Robie continued, "And how about a nice refreshing drink of Poppy Pop to go with your polly-lop?" The boy lifted his eyes, but didn't stop licking the candy. Robie waggled his claws slightly. "Just give me a quarter and within five seconds—"

A little girl wriggled out of the forest of legs. "Give me a polly-lop, too, Robie," she demanded.

"Rita, come back here!" a woman in the third rank of the crowd called angrily.

Robie scanned the newcomer gravely. His reference silhouettes were not good enough to let him distinguish the sex of children, so he merely repeated, "Hello, youngster."

"Rita!"

"Give me a polly-lop!"

Disregarding both remarks, for a good salesman is single-minded and does not waste bait, Robie said winningly, "I'll bet you read *Junior Space Killers*. Now I have here—"

"Uh-uh, I'm a girl. He got a polly-lop."

AT the word "girl," Robie broke off. Rather ponderously, he said, "I'll bet you read *Gee-Gee Jones, Space Stripper*. Now I have here the latest issue of that thrilling comic, not yet in the stationary vending machines. Just give me fifty cents and within five—"

"Please let me through. I'm her mother."

A young woman in the front rank drawled over her powder-sprayed shoulder, "I'll get her for you," and slithered out on six-inch platform shoes. "Run away, children," she said nonchalantly. Lifting her arms behind her head, she pirouetted slowly before Robie to show how much she did for her bolero half-jacket and her form-fitting slacks that melted into skylon just above the knees. The little girl glared at her. She ended the pirouette in profile.

At this age-level, Robie's reference silhouettes permitted him to distinguish sex, though with occasional amusing and embarrassing miscalls. He whistled admiringly. The crowd cheered.

Someone remarked critically to a friend, "It would go over better if he was built more like a real robot. You know, like a man."

The friend shook his head. "This way it's subtler."

No one in the crowd was

watching the newsprint overhead as it scribbled, "Ice Pack for Hot Truce? Vanadin hints Russ may yield on Pakistan."

Robie was saying, "... in the savage new glamor-tint we have christened Mars Blood, complete with spray applicator and fit-all fingerstalls that mask each finger completely except for the nail. Just give me five dollars—uncrumpled bills may be fed into the revolving rollers you see beside my arm—and within five seconds—"

"No, thanks, Robie," the young woman yawned.

"Remember," Robie persisted, "for three more weeks, seductivizing Mars Blood will be unobtainable from any other robot or human vendor."

"No, thanks."

Robie scanned the crowd resourcefully. "Is there any gentleman here . . ." he began just as a woman elbowed her way through the front rank.

"I told you to come back!" she snapped at the little girl.

"But I didn't get my polly-lop!"

"... who would care to . . ."

"Rita!"

"Robie cheated. Ow!"

MEANWHILE, the young woman in the half bolero had scanned the nearby gentlemen on her own. Deciding that there

was less than a fifty per cent chance of any of them accepting the proposition Robie seemed about to make, she took advantage of the scuffle to slither gracefully back into the ranks. Once again the path was clear before Robie.

He paused, however, for a brief recapitulation of the more magical properties of Mars Blood, including a telling phrase about "the passionate claws of a Martian sunrise."

But no one bought. It wasn't quite time. Soon enough silver coins would be clinking, bills going through the rollers faster than laundry, and five hundred people struggling for the privilege of having their money taken away from them by America's first mobile sales robot.

But there were still some tricks that Robie had to do free, and one certainly should enjoy those before starting the more expensive fun.

So Robie moved on until he reached the curb. The variation in level was instantly sensed by his under-scanners. He stopped. His head began to swivel. The crowd watched in eager silence. This was Robie's best trick.

Robie's head stopped swiveling. His scanners had found the traffic light. It was green. Robie edged forward. But then the light turned red. Robie stopped again,

still on the curb. The crowd softly *ahhed* its delight.

It was wonderful to be alive and watching Robie on such an exciting day. Alive and amused in the fresh, weather-controlled air between the lines of bright skyscrapers with their winking windows and under a sky so blue you could almost call it dark.

(But way, way up, where the crowd could not see, the sky was darker still. Purple-dark, with stars showing. And in that purple-dark, a silver-green something, the color of a bud, plunged down at better than three miles a second. The silver-green was a newly developed paint that foiled radar.)

Robie was saying, "While we wait for the light, there's time for you youngsters to enjoy a nice refreshing Poppy Pop. Or for you adults—only those over five feet tall are eligible to buy—to enjoy an exciting Poppy Pop fizz. Just give me a quarter or—in the case of adults, one dollar and a quarter; I'm licensed to dispense intoxicating liquors—and within five seconds . . ."

But that was not cutting it quite fine enough. Just three seconds later, the silver-green bud bloomed above Manhattan into a globular orange flower. The skyscrapers grew brighter and brighter still, the brightness of the inside of the Sun. The win-

dows winked blossoming white fire-flowers.

The crowd around Robie bloomed, too. Their clothes puffed into petals of flame. Their heads of hair were torches.

THE orange flower grew, stem and blossom. The blast came. The winking windows shattered tier by tier, became black holes. The walls bent, rocked, cracked. A stony dandruff flaked from their cornices. The flaming flowers on the sidewalk were all leveled at once. Robie was shoved ten feet. His metal hoopskirt dimpled, regained its shape.

The blast ended. The orange flower, grown vast, vanished overhead on its huge, magic beanstalk. It grew dark and very still. The cornice-dandruff pattered down. A few small fragments rebounded from the metal hoopskirt.

Robie made some small, uncertain movements, as if feeling for broken bones. He was hunting for the traffic light, but it no longer shone either red or green.

He slowly scanned a full circle. There was nothing anywhere to interest his reference silhouettes. Yet whenever he tried to move, his under-scanners warned him of low obstructions. It was very puzzling.

The silence was disturbed by moans and a crackling sound, as

faint at first as the scampering of distant rats.

A seared man, his charred clothes fuming where the blast had blown out the fire, rose from the curb. Robie scanned him.

"Good day, sir," Robie said. "Would you care for a smoke? A truly cool smoke? Now I have here a yet-unmarketed brand..."

But the customer had run away, screaming, and Robie never ran after customers, though he could follow them at a medium brisk roll. He worked his way along the curb where the man had sprawled, carefully keeping his distance from the low obstructions, some of which writhed now and then, forcing him to jog. Shortly he reached a fire hydrant. He scanned it. His electronic vision, though it still worked, had been somewhat blurred by the blast.

"Hello, youngster," Robie said. Then, after a long pause, "Cat got your tongue? Well, I have a little present for you. A nice, lovely polly-lop.

"Take it, youngster," he said after another pause. "It's for you. Don't be afraid."

His attention was distracted by other customers, who began to rise up oddly here and there, twisting forms that confused his reference silhouettes and would not stay to be scanned properly. One cried, "Water," but no quar-

ter clinked in Robie's claws when he caught the word and suggested, "How about a nice refreshing drink of Poppy Pop?"

The rat-crackling of the flames had become a jungle muttering. The blind windows began to wink fire again.

A little girl marched, stepping neatly over arms and legs she did not look at. A white dress and the once taller bodies around her had shielded her from the brilliance and the blast. Her eyes were fixed on Robie. In them was the same imperious confidence, though none of the delight, with which she had watched him earlier.

"Help me, Robie," she said. "I want my mother."

"Hello, youngster," Robbie said. "What would you like? Comics? Candy?"

"Where is she, Robie? Take me to her."

"Balloons? Would you like to watch me blow up a balloon?"

The little girl began to cry. The sound triggered off another of Robie's novelty circuits, a service feature that had brought in a lot of favorable publicity.

"Is something wrong?" he asked. "Are you in trouble? Are you lost?"

"Yes, Robie. Take me to my mother."

"Stay right here," Robie said

reassuringly, "and don't be frightened. I will call a policeman." He whistled shrilly, twice.

Time passed. Robie whistled again. The windows flared and roared. The little girl begged, "Take me away, Robie," and jumped onto a little step in his hoopskirt.

"Give me a dime," Robie said.

The little girl found one in her pocket and put it in his claws.

"Your weight," Robie said, "is fifty-four and one-half pounds."

"Have you seen my daughter, have you seen her?" a woman was

crying somewhere. "I left her watching that thing while I stepped inside—*Rita!*"

"Robie helped me," the little girl began babbling at her. "He knew I was lost. He even called the police, but they didn't come. He weighed me, too. Didn't you, Robie?"

But Robie had gone off to peddle Poppy Pop to the members of a rescue squad which had just come around the corner, more robotlike in their asbestos suits than he in his metal skin.

—FRITZ LEIBER

FORECAST

Next month, J. T. M'Intosh's high-tension novella, *MIND ALONE*, follows up his remarkable successes in this magazine. It's the story of an interstellar war . . . but not about who destroys how much with what weapons and strategy, which is really the dull side of war, but of people whipped about by the unleashed forces. The infuriating thing was that there was no reason for the colonists' revolt against Earth. But the rebels had every reason to conceal that fact!

Two powerful novelets support the swift, sleek convoy of stories:

STAMPED CAUTION by Raymond Z. Gallun very cautiously handles a situation that could turn explosive with only the slightest jostling. It's an odd fact that monsters usually seem to be of the opinion that we're the ones who are monsters. You know, they have a point . . . it's probably a good idea not to argue it with them!

Robert Sheckley's *DIPLOMATIC IMMUNITY* introduces a character more polite and reasonable and deadly than any in history, for if Earth was to live as a free world, he had to die. He admitted he wasn't immortal—and yet nothing could kill him!

Short stories, of course, and our regular features. Speaking of which, have you joined the pleased crowd of readers whose questions have been answered by Willy Ley either through the mail or in *FOR YOUR INFORMATION*? If any science problem is bothering you, let him know . . . right now!



GALAXY'S 5 Star Shelf

MODERN SCIENCE FICTION. Edited by Reginald Bret-
nor. Coward McCann, New York,
1953. 294 pages, \$3.75

THIS fascinating, exasperating book should be in the collection of everyone who has more than a passing interest in science fiction, despite the fact that it takes itself and its subject too seriously a good part of the time. It says dogmatically that science fiction is anything from today's literature of ideas to—quite simply—the literature of tomorrow.

There is, of course, a lot that is valuable as information, and

nearly as much that is important as evaluation. Sprague de Camp, on imaginative fiction, and Arthur Clarke, on science fiction as preparation for the age of space, both present amusing data on the utopias and pre-Gernsbackian "science" fantasies that so thickly populated the 19th and early 20th Centuries.

Anthony Boucher and Don Fabun give us richly informative discourses on science fiction publishing, and in movies, radio and TV. Fletcher Pratt delivers himself of some occasionally pertinent criticisms of current science fiction trends, fads and failures.

John W. Campbell, Isaac Asimov and Bretnor himself devote their energies to discussing how significant science fiction has been, is, or may be. It is my feeling that they are all a little too dire. Philip Wylie takes a characteristically negative attitude on science fiction's significance, or its values as social criticism. His diatribe against secrecy in science, however, should be read much more widely than it probably will be.

Gerald Heard has a (to me) confusing view of science fiction's influences on morals and religion, which he says are slight today, but may be great tomorrow. I hope he is right.

The essay I enjoyed most is "Science Fiction and the Main Stream," by poetess Rosalie Moore. Here is the book's most perceptive analysis of science fiction's strengths, weaknesses, and possibilities as a literary form. The author compares the genre with other types of modern fiction, giving a very acute report that makes excellent sense throughout.

Incidentally—where was Gold when the contributors were being selected? He certainly has opinions worth hearing.

WEST OF THE SUN by Edgar Pangborn. Doubleday & Co., New York, 1953. 219 pages, \$2.75

HERE is a first-rate tale of the rewards and tragedies of pioneering on a far planet that sees print in hard covers without prior serialization. Why? It is relatively slow-paced; it pays more attention to character development, sentiment and ideas than it does to plotting.

From one point of view, the book is less science fiction than a novel of exploration in the Swiss Family Robinson tradition. Few indeed are the gadgets; missing entirely the derring-do of ordinary space opera. For those who like understated writing, warm characterizations, human-scale happenings (even when they happen to quite believable BEMs) and the lively interplay of moral ideas, this book will have a solid appeal. It is a first-rate first novel by any standard, science fictional or otherwise.

THE BEST FROM FANTASY AND SCIENCE FICTION: SECOND SERIES. Edited by Anthony Boucher and J. Francis McComas. Little, Brown & Co., Boston, 1953. 270 pages, \$3.00

THIS second annual series of items from our esteemed competitor's pages contains 18 short stories, ranging from a hilarious bit of spoofery by Jan Struther called "Ugly Sister" and Ralph Robin's farcical yet sharp "Bud-

ding Explorer" to Alfred Bester's scintillating "Hobson's Choice," brutal and bitterly gay, and Manly Wellman's surprisingly beautiful bit of ghostly folklore, "The Desrick on Yandro."

The book, indeed, runs a gamut that is a gamut and should be used as an example for critics who abuse the word.

In addition to those mentioned above, there's Jack Finney's time fantasy, "The Third Level;" Elizabeth Bowen's piece of fine writing, "The Cheery Soul;" H. B. Fyfe's charmingly horrid "Ransom;" Mildred Clingerman's heartbreaking "Stair Trick;" Kem Bennett's delightful "Soothsayer;" and several others nearly as good.

Enthusiastically recommended.

SENTINELS FROM SPACE by Eric Frank Russell. Bouregy & Curl, Inc., New York, 1953. 256 pages, \$2.75

THE author of *Sinister Barrier* and *Dreadful Sanctuary* has produced a third novel (serialized under the title *The Star Watchers*) which, like the first two, deals with the idea that Man is in one way or another being managed by extra-solar or extra-dimensional beings.

The sentinels from space in the current tale are delightful people to know, for a change, and they

are trying to help mankind, now spread over Venus and Mars as well as Earth, to avoid committing race suicide through war, if possible.

It seems that space travel has resulted in innumerable mutations in Man, due to the hard radiations in space. The mutants possess various supernormal powers, from telepathy and teleportation to pyrotics and levitation. The tale tells how a plot to take over the triplanetary civilization is defeated by the sentinel David Raven, with the help of his opposite number on Venus, Charles by name.

The story is one of the most inventive of the last year or so. It is rich with experiment in the mental sciences, and strong in its plea for sanity in our own lives: a fable for peace as well as a fine science fantasy.

Guest reviewer Isaac Asimov now discusses:

FLYING SAUCERS by Donald H. Menzel. Harvard University Press, Cambridge, Mass., 1953. 319 pages, \$4.75

DR. Menzel, Acting Director of the Harvard College Observatory, does not believe in flying saucers—and proves he's right in authoritative and interesting detail in this book.

Flying saucers are atmospheric

phenomena resulting from very usual and prosaic laws of refraction and reflection of light by a vari-temperated atmosphere—not interplanetary adventurers poking about our volcanic mud ball.

The book discusses these atmospheric tricks quietly and good-naturedly; photographs show various species of flying saucers, from fakes to clouds to variously focused lights. Not a spaceship in the bunch.

Dr. Menzel points out that flying saucers are not only a contemporary phenomenon. He traces them back to their equivalents in Biblical times, and reviews the scares they caused in the last decades of the 19th Century. They were thought to be *airships* in those days.

Today, people are jittery over the cold war. They have heard a lot about super-weapons. They know now that space travel may really be practical. So they jump to conclusions whenever reports of strange lights or objects are spread, conclusions completely unwarranted by the evidence at hand.

We should read this book for positive enjoyment as well as for an antidote to the deep end off which it is so tempting to go. My own personal use for it will involve braining with its edge the next innocent who says: "But

don't all science-fiction writers believe in flying saucers?"

—ISAAC ASIMOV

THE WORM OUROBOROS by E. R. Eddison. E. P. Dutton & Co., Inc., New York, 1952. 446 pages, \$5.00

REPRINTED for the first time since its original publication in 1926, this is one of the great fantasy-romance-adventures of all time. It is a modern imaginative *Edda*, perhaps the most magnificent piece of swashbuckling imagination of this century—a recreation of the Age of Chivalry in a Never-Never Land called Mercury.

As the late James Stephens put it in his introduction to the original edition (here also reprinted): "Waking or in dream, this author has been in strange regions and has supped at a torrent which only the greatest know of."

The result is sheer magic that even tough and materialistic science fiction buffs will love.

THE TITAN by P. Schuyler Miller. Fantasy Press, Reading, Pa. 1952. 252 pages, \$3.00

ANOSTALGIC collection of seven short stories and novel-ets and one heretofore-unpublished short novel, by my opposite

number over on *Astounding*.

The time of writing ranges from 1931, when the author must still have been toddling, through 1944.

The quality ranges from the highly effective, as in "As Never Was" and "Forgotten," (both previously anthologized) and "Gleeps," (delightfully ridiculous) to the abysmal, like the title novel, which the author informs me was rejected back in 1931.

Other items included are: "Old Man Mulligan," "Spawn," "In The Good Old Summer Time," and "The Arrhenius Horror," a fine old ghoulish-type thing from a 1931 *Amazing*.

—GROFF CONKLIN

OMNIBUS OF SCIENCE FICTION, Edited by Groff Conklin. Crown Publishers, New York, 1952. 574 pages, \$3.50

THERE are 43 stories in this volume, two of them—"Recruiting Station" by A. E. van Vogt and "The Scarlet Plague"

by Jack London—being themselves book-length short novels.

Practically every author of science fiction note is represented, as well as one or two famed writers who are not usually thought of as addicted to the genre. Furthermore, just about every type of S-F story is represented. Not the least of the book's virtues is its demonstration of the scope of science fiction, which is as large as thought itself.

Although none of the stories has been included in other science fiction anthologies, several have seen hard-cover publication before—something of a change in Mr. Conklin's anthologizing habits, and not one, we hope, that is establishing a trend in his books. Stories by Ray Bradbury, Lewis Padgett, A. E. van Vogt, Andre Maurois, Sprague de Camp, David Keller, H. P. Lovecraft, and Jack London have appeared elsewhere—true enough, mainly in books now unavailable. The stories themselves should never be allowed to go out of print.

—VILLIERS GERSON

The 11th World Science Fiction Convention will be held at the Bellevue Stratford Hotel in Philadelphia on September 5, 6, 7, 1953. You'll meet your favorite writers, artists and editors there. Send \$1 for membership to 11th World Science Fiction Convention, Box 2019, Philadelphia 3, Penn. You'll get all advance news and Progress Bulletins in return.

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GREEN



GREW THE LASSES

By RUTH LAURA WAINWRIGHT

*Since evils cancel out, avoid
odd numbers of them . . . even
if you have to get an odder one!*

Illustrated by DICK FRANCIS

THE September evening was hot and humid, and Helen Raymond, watching her husband pace nervously about the living room, grew tenser by the minute. Robert would walk up to an open window, sniff abstractedly, move to the next window, and repeat the performance.

"For goodness' sakes, Robert, what are you snuffling about?" she finally demanded in exasperation. She had been on edge ever since her cousin Dora had arrived that afternoon. Dora had lost another of a long succession of short-lived jobs and, as usual, had descended on them without warning for an indefinite visit. Wasn't it enough to have to bear, that

and the heat, too, without Robert's acting up?

"Smog's getting worse all the time," Robert complained.

Dora lifted her nose to sniff daintily. "It is an odd smog. Now in New York we don't—" Her voice trailed off and left the sentence hanging as she drew in another sample of the night air.

Helen sniffed, too. "We look like a bunch of rabbits," she thought irritably. But Dora was right. It was an odd smog, sort of sweet and bitter at the same time. Not sulphuric like most of the smog they were used to, or the spoiled-onions-frying-in-rancid-fat smell of oil wells when the wind was off the land. This

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odor made her think of rank tropical weeds, a jungle miasma, though she had never been near a jungle.

THERE was something familiar about it, though, and then she remembered that her hands had smelled like that the morning after she had weeded the tiny garden alongside their house. The flowerbed had been cluttered with weeds of a kind she had never seen before, horrible-looking things. Could they be the cause of that awful smell? They had sprung up everywhere lately, and, while she had pulled them out of their own garden, they were growing all over, and she couldn't very well weed the whole town, could she?

"I think—wait, I want to get something," she said, and ran outdoors.

She came back with a sample of the weed, one that she pulled from the garden of the vacant house next door. The plant was about a foot high, with a straight, stiff stem, of a bright metallic green, with a single row of inch-wide rosettes of chartreuse leaves or petals down one side of the stem. There could be no doubt about its being the cause of the unpleasant odor, and Helen held it out at arm's length.

"What the heck is that?" Robert asked.

"Smell!" she said.

"Phew! So that's it. What is it, anyway?"

Helen shook her head. "Never saw anything like it until recently. I pulled 'em out of our garden, but they're all over."

Helen carried the offending plant to the back door. When she came back, Robert peered at her intently, shut his eyes and shook his head quickly, and then stared at her again.

"Think you'll know me next time you see me?" she asked, annoyed.

"First good look I've had at you this evening. What kind of face powder is that you're using? Don't tell me that peculiar shade is the latest fashion?"

Puzzled, Helen put her hand to her face as if she should be able to feel the color.

"Mom's green!" chortled eight-year-old Bobby. "You ought to see yourself!"

"Green?" Helen asked worriedly.

"Green," Robert said. "You feel all right?"

"Anemia," Dora declared positively. "You don't eat properly. Not enough vitamins. Now, while I'm here—"

A quick look in the mirror, and Helen told herself that she wasn't really a green green, just sort of greenish, if you looked at her in the right light. By morning,

the odd color ought to be all gone. There was no sense in worrying. Anybody could look sort of off-color now and then. Maybe Dora was right—she was anemic.

BUT she was stunned by the first sight of herself in the mirror the next morning. There was no mistaking it this time. She was as green as grass, and Dora, too, was beginning to show signs of becoming that unbecoming color.

Reluctantly, Dora conceded that it might not be the diet, after all. She hadn't been there long enough for it to have that much effect.

Robert and Bobby were still shockingly normal.

"What—whatever can it be?" Helen asked shakily, holding out her green hands. The only answer was hysterical screaming that sent them all racing to the front door.

The Raymonds lived in a typical California court, with four small houses facing four other small houses across a central walk that ran at right angles to the street. On this walk most of the tenants were now gathered, and the Raymonds and Dora joined them.

Helen didn't know whether to feel relieved or more dismayed when she saw that all the women

and girls were as green as she, and just as terrified.

Someone, of course, had called the police, and a prowl car hummed to a stop at the curb. A harrassed, white-faced policeman leaned out of the window.

"We're doing all we can," he called. "It's like this all over town. Don't know yet what caused it, but we're investigating." The car sped away.

It was soon apparent that only Mimosa Beach was affected. Why, no one could guess. Some said it was all a publicity stunt of some kind, advertising a movie or television show, or a chlorophyll product, perhaps, but they couldn't explain how it worked, or why only women and girls were affected. And how could it possibly help sell anything?

Overnight, Mimosa Beach became famous, and infested with reporters and color photographers, all male. There would have been a mass exodus if there had been any place to go. But other communities, fearing that their womenfolk would "catch" the greenness, like measles, refused to let them in. Besides, in Mimosa Beach they had the dubious comfort of all being alike, while elsewhere they would have been freaks.

There was so little they could do to make themselves look attractive. The cosmetics they had

or that were available were all wrong. But they did the best they could, though there was no hiding that ghastly green complexion.

"What a shame your hair isn't red," Dora said one day to Helen. "Amy Olson, now, her hair really goes with green skin." Cocking her head to one side, she studied the younger woman intently. "Your hair—that mousy brown—wonder if we couldn't touch it up just a wee bit?"

Helen clenched her teeth against the coy, criticizing voice. "I'm not the flamboyant type," she said.

Dora was as green as Helen by this time, and it certainly wasn't a bit more becoming to her. She seemed to be enjoying the publicity, though. Besides, it gave her a good excuse for not leaving.

If only the greenness had come before Dora—they might have been spared one calamity!

FOUR girls moved into the house next to the Raymonds, the last house in the row.

Neither the Raymonds nor Dora noticed that they had moved in; they came so quietly. The houses in the court were furnished and they must have paid the rent, obtained the keys, and walked in, all settled as soon as they closed the door behind them. It wasn't until they rang

the Raymonds' doorbell in the early evening that anyone in the household was aware of them.

"We move next door," one of them said brightly to Helen when she answered the door. "We come see you, get acquainted. We come in?"

"Of course," Helen said, and they trooped in. "We're the Raymonds, and this is my cousin, Dora Hastings."

The new neighbor who had spoken first pointed to her companions, one by one. "Patricia Pontiac," she said. "Clara Ford. Mary Maroon. Me," poking a thumb at her own midriff, "Jack Jones."

"Jack Jones?" Helen repeated. "That's a man's name."

"Man?" the girl asked blankly.

"Man!" Robert said impatiently. "Like me."

The four girls noticed him for the first time, and then they saw Bobby. They stared at the two of them, their mouths slightly open, their eyes wide with horror. They drew closer to each other, as if for protection, and shivered.

Robert and Bobby looked at each other in bewildered embarrassment.

"My husband and son," Helen said tartly. Did these odd creatures think all males were wolves, including eight-year-old Bobby?

"That—that color!" Mary Maroon quavered. "Not green!"

"Only dames are green," Bobby scornfully said.

"Imagine!" Dora tittered nervously. "Afraid of Robert and Bobby!"

"Won't you sit down?" Helen asked. This nonsense of being scared of her menfolk had gone on long enough. She didn't want them to sit down. She wanted them to go. But she could hardly ask them to do that.

Naturally, they sat down.

Bobby turned on the television for a space opera, and the four new neighbors watched it avidly. When the spaceship landed on what was supposed to be Venus, they giggled behind their hands and looked at each other sidewise. Hadn't they ever seen a show like that before? What was so unusually funny about this one?

When the commercial came on, Robert turned off the sound. Mary Maroon looked at Bobby, and then at Helen, who was sitting with her arm around her son.

"You—baby?" she asked.

Helen smiled proudly. "Yes, this is my baby."

Bobby squirmed indignantly.

Mary Maroon then turned to Robert. "You got baby?"

Robert said, "Sure, this is my baby," patting Bobby on the knee. To Helen, he muttered, "What does she think, anyway?"

The four stared at Robert and Bobby and Helen in such obvious

confusion that Robert jumped up nervously to turn the sound back on.

AFTER the girls had gone home, Bobby was sent off to bed, and Robert, loosening his tie, demanded, "What's the matter with them, anyhow? Do they have to stare at me as if I were a damned biological error? Don't they know what a man is, for heaven's sake?"

"Really, Robert," Dora protested, blushing a deeper green.

"Well, for gosh sakes—"

"Those names!" Helen said. "Clara Ford, that's not too bad. I'm not so sure about Mary Maroon."

Dora nodded. "Mary White. Mary Black. So why not Mary Maroon? But Patricia Pontiac!"

Helen threw up her hands. "They must have made that one up. But *Jack Jones*!"

"Crazy, if you ask me," Robert said, "pretending they were scared of me and Bobby."

"There's a Patricia Beauty Shoppe next to the Pontiac agency," Dora suggested. "Maybe—"

"Funny way to get a name. Where the heck are they from?" Robert wondered.

"Must be from right here in town," Helen reminded him. "Otherwise they wouldn't be green."

"You know, the greenness looks sort of natural on them," Dora said thoughtfully. "Well, think I'll go to bed."

After she had gone, Helen said wistfully in a whisper, "If only awful things could sort of counteract each other the way some poisons do." She started making up the davenport bed; Dora had their room. "First Dora's coming, and our turning green, and now those crazy girls right next door. But three poisons—no, it wouldn't come out even."

IT was a day or two later when Helen found her new neighbors working in the little flower-bed alongside their house. They were busily transplanting weeds of the kind responsible for the unpleasant odor.

"For goodness' sake!" Helen exclaimed, disgusted. "What in the world do you want with that stuff? Why, it took the rest of us here in the court days to get it all out and now you want to bring it back. Throw it away!"

"Oh, no!" Patricia Pontiac objected, holding a bunch of the weeds against her heart protectingly. "It's faneweed!"

"You mean you've seen the stuff before?"

Patricia nodded. "We have it all over where we came from. Must have faneweed."

"But you couldn't have come

from some place else," Helen pointed out. "You wouldn't be green if you did."

"All green where we come from," Mary Maroon said.

"I don't know where that stuff—faneweed, you call it—came from," Helen said, refusing to pay any attention to their claim that they came from some place else where everyone was green. There just wasn't any such place!

"We drop seed other time we come," Patricia said. Then she added indignantly, "You no believe we come from other place?"

"What other place?" asked Helen, with weary politeness.

"You call it Venus."

"That picture the other night," Clara Ford giggled. "Not like Venus at all. So funny!"

Helen could stand no more. "So are you!" she said rudely, and went into the house.

They were even crazier than she'd thought. Greener, too, when you saw them in broad daylight. Did the greenness affect the mind, and the greener you got, the zanier you became? Would she get to be like that? The idea frightened her.

"No turn green?" Patricia Pontiac asked Robert plaintively one day, as if she were blaming him for her bewilderment.

"No!" he answered shortly. "But I don't blame you for envying us men. It must be tough to

be that lousy-looking color."

"Green is good color!" Mary Maroon declared stoutly. "You no have baby yourself?"

"Of course not!"

Patricia turned to Helen. "Then what she for?"

"*He!*" Robert corrected, and then added sarcastically, "Papa works to buy baby shoes. Now, does that answer your question?"

Helen sighed. There was just no use trying to explain anything to those four girls.

FALL and winter passed. The dull monotony of being green was accented now and then by articles and pictures in newspapers and magazines, and by rumors, always proved false, that a remedy had been found, though chemists, biologists and doctors continued hunting for the cause of the catastrophe. Autopsies provided no clue. Women protested that the doctors were looking at them with a wishful drop-dead expression, as if the next autopsy might be the one that would supply the answer.

The greenness was still confined to Mimosa Beach. Other communities kept up their quarantine. The four girls next door to the Raymonds were as zany as ever, and Dora Hastings stayed on, of necessity.

And then the monotony was broken by greater calamities.

First, there was the matter of Patricia Pontiac's approaching motherhood. While this, of course, made no difference as far as the town was concerned, Dora was greatly perturbed, and, ever being one to insist on others keeping within the limits of her own narrow paths, she took the girl to task.

"Patricia," she insisted sternly, "there simply *must* be a man to blame for your condition! You *must* marry him. Think of the baby! You want him to be fatherless?"

"Fatherless? Him?" Patricia repeated, frowning in perplexity. "What you talking about? My little baby girl all mine. This man business I don't understand."

"Nonsense! You're just trying to pretend innocence."

"Oh, give it up, Dora," Helen urged wearily. "She doesn't know what you're talking about."

Dora raised skeptical eyebrows. "In *her* condition?"

After that, Dora went around with a great air of virtue condescending to help the wayward. It must be a burden, Helen felt, to have to feel superior because of other people's faults. Such a negative sort of superiority.

DURING the next few weeks, Dora had plenty of chance to feel superior. Other unmarried girls and women besides Patricia

became pregnant and, like Patricia, they insisted no man was responsible. But they were not complacent about it the way Patricia was; to them it was an indignity they did not deserve.

"What's this town coming to, anyway?" Dora demanded.

"Parthenogenetic births, maybe?" Helen ventured. "No one would have believed that we'd turn green, but we did. Honestly, Dora, I'm getting so I'd believe almost anything in this nightmare existence of ours, even that you were about to have a baby!"

"That," Dora rejoined acidly, "is not at all likely. But are you trying to imply that our turning green could have something to do with these shameful births?"

"I didn't say that, but you could be right."

"Hmmp!" Dora snorted. "A lot of nonsense!"

The four girls were in the Raymonds' living room one afternoon, a week later, talking with Helen, when Dora, who had been feeling ill and had gone to the doctor's, walked in. She glared at the four girls.

"I'm going to have a baby," she accused them.

Helen drew her breath in sharply. "Oh, no! Not you, too!"

"Of course," Clara Ford said complacently. "Every one have babies. Except Robert and Bobby and the ones like them. Jack and

Mary and I have ours before we leave Venus. Have only one each, of course."

"But why am *I* like this? How can *I* have a baby this way?" Dora's voice was shrill with anger and panic.

"How else?" Jack asked calmly.

A little chill of horror raced down Helen's spine. Could these odd girls really be telling the truth? Were they from Venus, as they insisted? She could just imagine them coming to Earth—on a Flying Saucer, maybe—listening to the radio to learn the language. Spying on us, but not learning as much as they thought they did. She choked off a giggle, an incipient hysteria, as another thought struck her.

"Will *I* have one of those—those—?"

"You already have baby," Patricia said. "Can't see how you have baby before we come with faneweed to make you green."

Helen and Dora stared at her.

"You mean," Helen finally was able to ask, "that that weed caused all this? That little weed?"

"But that is what we tell you all along, only you always walk away angry."

ALL those scientists working so hard, Helen realized bitterly, and all the time what they were looking for was literally under their feet! How could anyone have

thought that the faneweed was responsible for anything but the bad smell they had finally become accustomed to?

"Why didn't I listen to these girls, pay more attention to what they said?" Helen asked herself. She might have been able to prevent a lot of things that had happened. She got up from her chair and walked nervously about. Well, she couldn't change the past, but she could stop further evil from the faneweed.

"I'll bet they don't have men on Venus," she said to Dora, "judging from the way they act. Then they'd have to have parthenogenetic births."

She turned to Patricia. "Why did you come to Earth? And why just to Mimosa Beach?"

"We try little place, what you call sample, before we change whole world," Patricia explained. And then she added sadly, "So many of our babies die. Not enough people left on Venus. We think maybe you like to come to Venus with us, so we make you as us."

"That was very, very wicked of you!" Dora said severely.

The four Venusians shrugged resignedly.

"Might as well go home," Mary Maroon said. "They don't like it our way."

"And leave me like this?" Dora demanded shrilly.

"Get rid of faneweed, be as before," Patricia assured her.

"With a baby I'll have trouble accounting for," Dora said bitterly. "Oh, no, you don't. You stay right here. And, Helen, don't you tell anybody that it's the faneweed. Then people from other places won't know about my baby, and it won't matter here as long as things are the way they are."

"You come with us," Clara suggested wheedlingly. "You'll like Venus. Venus so pretty! No work, all happiness!"

"No work? No wonder the babies die!" Dora exclaimed.

Helen could see the yeast of reform beginning to work in Dora. The four Venusians looked puzzled. "They do that all the time," Helen thought irritably. Aloud, she said, "Dora, of course I have to tell about the faneweed. There are others involved, you know."

"I don't suppose," Dora interrupted, "that you girls know anything about diet. Those babies could probably be saved with a little intelligence and some hard work."

WHEN the four Venusians left shortly thereafter for their home, they took along Dora Hastings, who had great plans for their planet.

With the faneweed on Earth destroyed, the women and girls of

Mimosa Beach returned to their original color. Even the parthenogenetic baby girls born as a result of the unfortunate experiment of the Venusians were white.

"Well, the bad things went in pairs, after all," Helen said to Robert when everything was normal again. "The faneweed was the fourth evil, though we didn't know it. And when we got rid of the faneweed, the green-

ness left. The Venusians went away and—and I do hope Dora's all right!"

"She finally got what should be a lifetime job," Robert answered. He crossed his fingers and, looking out of a western window at Venus, bright against the darkening sky, added, "At least, Venus is farther away than New York. That ought to help."

—RUTH LAURA WAINWRIGHT

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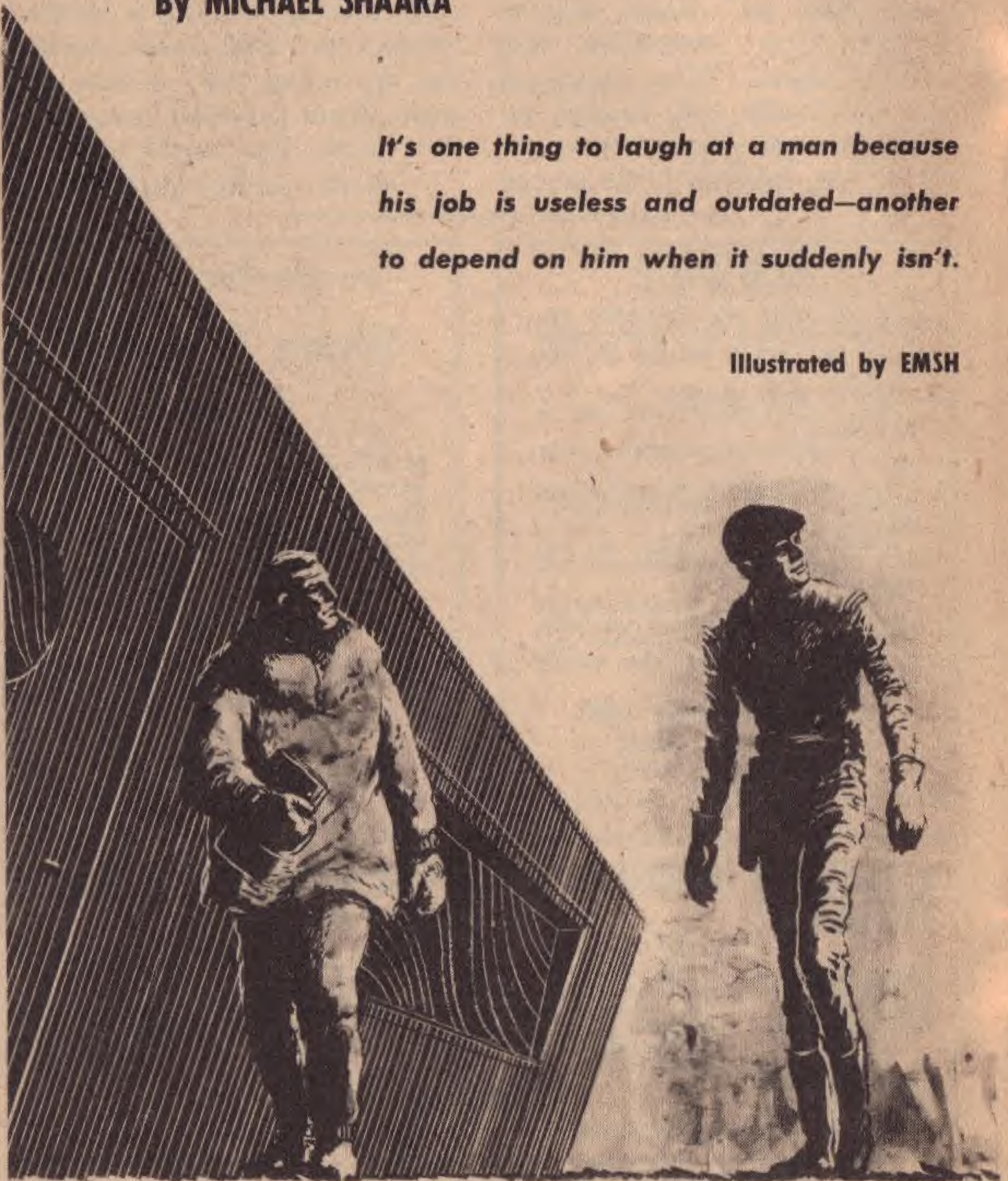
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SOLDIER BOY

By **MICHAEL SHAARA**

*It's one thing to laugh at a man because
his job is useless and outdated—another
to depend on him when it suddenly isn't.*

Illustrated by **EMSH**

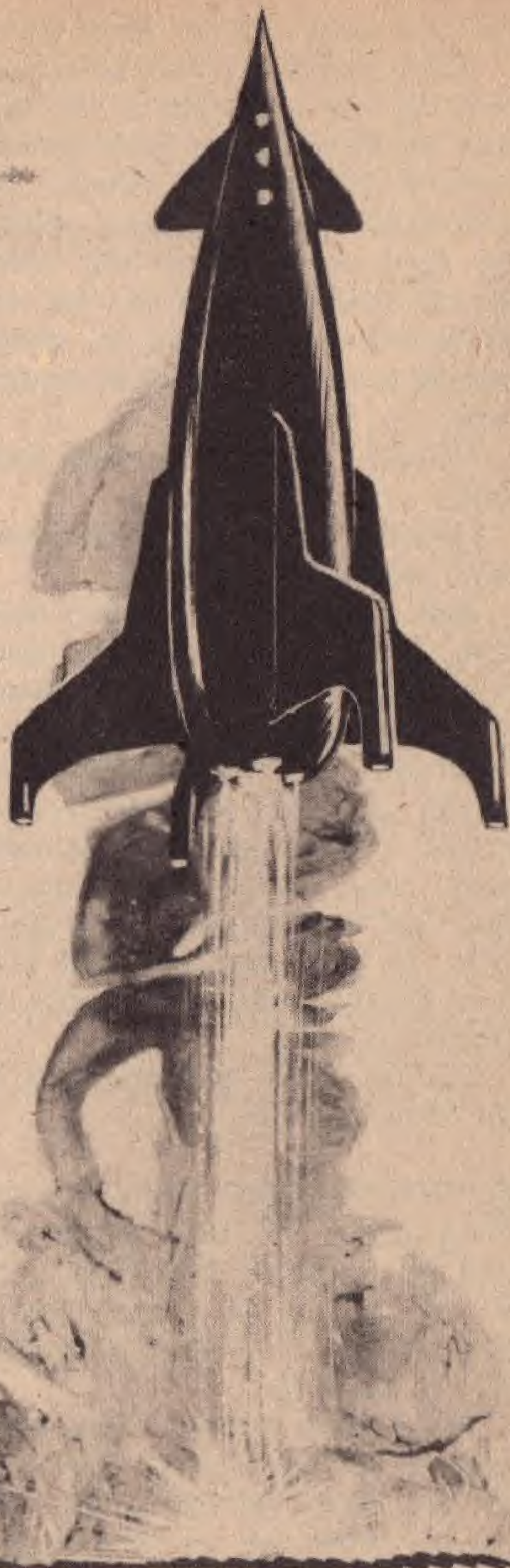


In the northland, deep, and in a great cave, by an everburning fire the Warrior sleeps. For this is the resting time, the time of peace, and so shall it be for a thousand years. And yet we shall summon him again, my children, when we are sore in need, and out of the north he will come, and again and again, each time we call, out of the dark and the cold, with the fire in his hands, he will come.

—Scandinavian legend

THROUGHOUT the night, thick clouds had been piling in the north; in the morning, it was misty and cold. By eight o'clock a wet, heavy, snow-smelling breeze had begun to set in, and because the crops were all down and the winter planting done, the colonists brewed hot coffee and remained inside. The wind blew steadily, icily from the north. It was well below freezing when, some time after nine, an army ship landed in a field near the settlement.

There was still time. There were some last brief moments in which the colonists could act and feel as they had always done. They therefore grumbled in annoyance. They wanted no soldiers here. The few who had convenient windows stared out with distaste and a mild curiosity, but



no one went out to greet them.

After a while a rather tall, frail-looking man came out of the ship and stood upon the hard ground looking toward the village. He remained there, waiting stiffly, his face turned from the wind. It was a silly thing to do. He was obviously not coming in, either out of pride or just plain orneriness.

"Well, I never," a nice lady said.

"What's he just *standing* there for?" another lady said.

And all of them thought: well, God knows what's in the mind of a soldier, and right away many people concluded that he must be drunk. The seed of peace was deeply planted in these people, in the children and the women, very, very deep. And because they had been taught, oh so carefully, to hate war they had also been taught, quite incidentally, to despise soldiers.

The lone man kept standing in the freezing wind.

EVENTUALLY, because even a soldier can look small and cold and pathetic, Bob Rossel had to get up out of a nice, warm bed and go out in that miserable cold to meet him.

The soldier saluted. Like most soldiers, he was not too neat and not too clean and the salute was sloppy. Although he was bigger

than Rossel he did not seem bigger. And, because of the cold, there were tears gathering in the ends of his eyes.

"Captain Dylan, sir." His voice was low and did not carry. "I have a message from Fleet Headquarters. Are you in charge here?"

Rossel, a small sober man, grunted. "Nobody's in charge here. If you want a spokesman I guess I'll do. What's up?"

The captain regarded him briefly out of pale blue, expressionless eyes. Then he pulled an envelope from an inside pocket, handed it to Rossel. It was a thick, official-looking thing and Rossel hefted it idly. He was about to ask again what was it all about when the airlock of the hovering ship swung open creakily. A beefy, black-haired young man appeared unsteadily in the doorway, called to Dylan.

"C'n I go now, Jim?"

Dylan turned and nodded.

"Be back for you tonight," the young man called, and then, grinning, he yelled "Catch" and tossed down a bottle. The captain caught it and put it unconcernedly into his pocket while Rossel stared in disgust. A moment later the airlock closed and the ship prepared to lift.

"Was he *drunk*?" Rossel began angrily. "Was that a bottle of *liquor*?"

The soldier was looking at him calmly, coldly. He indicated the envelope in Rossel's hand. "You'd better read that and get moving. We haven't much time."

He turned and walked toward the buildings and Rossel had to follow. As Rossel drew near the walls the watchers could see his lips moving but could not hear him. Just then the ship lifted and they turned to watch that, and followed it upward, red spark-tailed, into the gray spongy clouds and the cold.

After a while the ship went out of sight, and nobody ever saw it again.

THE first contact Man had ever had with an intelligent alien race occurred out on the perimeter in a small quiet place a long way from home. Late in the year 2360—the exact date remains unknown—an alien force attacked and destroyed the colony at Lupus V. The wreckage and the dead were found by a mail-ship which flashed off screaming for the army.

When the army came it found this: Of the seventy registered colonists, thirty-one were dead. The rest, including some women and children, were missing. All technical equipment, all radios, guns, machines, even books, were also missing. The buildings had been burned, so were the bodies.

Apparently the aliens had a heat ray. What else they had, nobody knew. After a few days of walking around in the ash, one soldier finally stumbled on something.

For security reasons, there was a detonator in one of the main buildings. In case of enemy attack, Security had provided a bomb to be buried in the center of each colony, because it was important to blow a whole village to hell and gone rather than let a hostile alien learn vital facts about human technology and body chemistry. There was a bomb at Lupus V too, and though it had been detonated it had not blown. The detonating wire had been cut.

In the heart of the camp, hidden from view under twelve inches of earth, the wire had been dug up and cut.

The army could not understand it and had no time to try. After five hundred years of peace and anti-war conditioning the army was small, weak and without respect. Therefore, the army did nothing but spread the news, and Man began to fall back.

In a thickening, hastening stream he came back from the hard-won stars, blowing up his homes behind him, stunned and cursing. Most of the colonists got out in time. A few, the farthest and loneliest, died in fire before the army ships could reach them.

And the men in those ships, drinkers and gamblers and veterans of nothing, the dregs of a society which had grown beyond them, were for a long while the only defense Earth had.

This was the message Captain Dylan had brought, come out from Earth with a bottle on his hip.

AN obscenely cheerful expression upon his gaunt, not too well shaven face, Captain Dylan perched himself upon the edge of a table and listened, one long booted leg swinging idly. One by one the colonists were beginning to understand. War is huge and comes with great suddenness and always without reason, and there is inevitably a wait, between acts, between the news and the motion, the fear and the rage.

Dylan waited. These people were taking it well, much better than those in the cities had taken it. But then, these were pioneers. Dylan grinned. Pioneers. Before you settle a planet you boil it and bake it and purge it of all possible disease. Then you step down gingerly and inflate your plastic houses, which harden and become warm and impregnable; and send your machines out to plant and harvest; and set up automatic factories to transmute dirt into coffee; and, without ever having lifted a finger, you have

braved the wilderness, hewed a home out of the living rock and become a pioneer. Dylan grinned again. But at least this was better than the wailing of the cities.

This Dylan thought, although he was himself no fighter, no man at all by any standards. This he thought because he was a soldier and an outcast; to every drunken man the fall of the sober is a happy thing. He stirred restlessly.

By this time the colonists had begun to realize that there wasn't much to say, and a tall, handsome woman was murmuring distractedly: "Lupus, Lupus—doesn't that mean wolves or something?"

Dylan began to wish they would get moving, these pioneers. It was very possible that the aliens would be here soon, and there was no need for discussion. There was only one thing to do and that was to clear the hell out, quickly and without argument. They began to see it.

But, when the fear had died down, the resentment came. A number of women began to cluster around Dylan and complain, working up their anger. Dylan said nothing. Then the man Rosel pushed forward and confronted him, speaking with a vast annoyance.

"See here, soldier, this is our planet. I mean to say, this is our home. We demand some pro-

tection from the fleet. By God, we've been paying the freight for you boys all these years and it's high time you earned your keep. We demand . . ."

It went on and on while Dylan looked at the clock and waited. He hoped that he could end this quickly. A big gloomy man was in front of him now and giving him that name of ancient contempt, "soldier boy." The gloomy man wanted to know where the fleet was.

"There is no fleet. There are a few hundred half-shot old tubs that were obsolete before you were born. There are four or five new jobs for the brass and the government. That's all the fleet there is."

DYLAN wanted to go on about that, to remind them that nobody had wanted the army, that the fleet had grown smaller and smaller . . . but this was not the time. It was ten-thirty already and the damned aliens might be coming in right now for all he knew, and all they did was talk. He had realized a long time ago that no peace-loving nation in the history of Earth had ever kept itself strong, and although peace was a noble dream, it was ended now and it was time to move.

"We'd better get going," he finally said, and there was quiet.

"Lieutenant Bossio has gone on to your sister colony at Planet Three of this system. He'll return to pick me up by nightfall and I'm instructed to have you gone by then."

For a long moment they waited, and then one man abruptly walked off and the rest followed quickly; in a moment they were all gone. One or two stopped long enough to complain about the fleet, and the big gloomy man said he wanted guns, that's all, and there wouldn't nobody get him off his planet. When he left, Dylan breathed with relief and went out to check the bomb, grateful for the action.

Most of it had to be done in the open. He found a metal bar in the radio shack and began chopping at the frozen ground, following the wire. It was the first thing he had done with his hands in weeks, and it felt fine.

Dylan had been called up out of a bar—he and Bossio—and told what had happened, and in three weeks now they had cleared four colonies. This would be the last, and the tension here was beginning to get to him. After thirty years of hanging around and playing like the town drunk, a man could not be expected to rush out and plug the breach, just like that. It would take time.

He rested, sweating, took a pull from the bottle on his hip.

Before they sent him out on this trip they had made him a captain. Well, that was nice. After thirty years he was a captain. For thirty years he had bummed all over the west end of space, had scraped his way along the outer edges of Mankind, had waited and dozed and patrolled and got drunk, waiting always for something to happen. There were a lot of ways to pass the time while you waited for something to happen, and he had done them all.

Once he had even studied military tactics.

He could not help smiling at that, even now. Damn it, he'd been green. But he'd been only nineteen when his father died—of a hernia, of a crazy fool thing like a hernia that killed him just because he'd worked too long on a heavy planet—and in those days the anti-war conditioning out on the Rim was not very strong. They talked a lot about guardians of the frontier, and they got him and some other kids and a broken-down doctor. And . . . now he was a captain.

He bent his back savagely, digging at the ground. You wait and you wait and the edge goes off. This thing he had waited for all those damn days was upon him now and there was nothing he could do but say the hell with it and go home. Somewhere along

the line, in some dark corner of the bars or the jails, in one of the million soul-murdering insults which are reserved especially for peacetime soldiers, he had lost the core of himself, and it didn't particularly matter. That was the point: it made no particular difference if he never got it back. He owed nobody. He was tugging at the wire and trying to think of something pleasant from the old days, when the wire came loose in his hands.

Although he had been, in his cynical way, expecting it, for a moment it threw him and he just stared. The end was clean and bright. The wire had just been cut.

DYLAN sat for a long while by the radio shack, holding the ends in his hands. He reached almost automatically for the bottle on his hip and then, for the first time he could remember, let it go. This was real, there was no time for that.

When Rossel came up, Dylan was still sitting. Rossel was so excited he did not notice the wire.

"Listen, soldier, how many people can your ship take?"

Dylan looked at him vaguely. "She sleeps two and won't take off with more'n ten. Why?"

His eyes bright and worried, Rossel leaned heavily against the

shack. "We're overloaded. There are sixty of us and our ship will only take forty. We came out in groups, we never thought . . ."

Dylan dropped his eyes, swearing silently. "You're sure? No baggage, no iron rations; you couldn't get ten more on?"

"Not a chance. She's only a little ship with one deck—she's all we could afford."

Dylan whistled. He had begun to feel light-headed. "It 'pears that somebody's gonna find out first hand what them aliens look like."

It was the wrong thing to say and he knew it. "All right," he said quickly, still staring at the clear-sliced wire, "we'll do what we can. Maybe the colony on Three has room. I'll call Bossio and ask."

The colonist had begun to look quite pitifully at the buildings around him and the scurrying people.

"Aren't there any fleet ships within radio distance?"

Dylan shook his head. "The fleet's spread out kind of thin nowadays." Because the other was leaning on him he felt a great irritation, but he said, as kindly as he could, "We'll get 'em all out. One way or another, we won't leave anybody."

It was then that Rossel saw the wire. Thickly, he asked what had happened.

Dylan showed him the two clean ends. "Somebody dug it up, cut it, then buried it again and packed it down real nice."

"The damn fool!" Rossel exploded.

"Who?"

"Why, one of . . . of us, of course. I know nobody ever liked sitting on a live bomb like this, but I never . . ."

"You think one of your people did it?"

Rossel stared at him. "Isn't that obvious?"

"Why?"

"Well, they probably thought it was too dangerous, and silly too, like most government rules. Or maybe one of the kids . . ."

IT was then that Dylan told him about the wire on Lupus V. Rossel was silent. Involuntarily, he glanced at the sky, then he said shakily, "Maybe an animal?"

Dylan shook his head. "No animal did that. Wouldn't have buried it, or found it in the first place. Heck of a coincidence, don't you think? The wire at Lupus was cut just before an alien attack, and now this one is cut too—newly cut."

The colonist put one hand to his mouth, his eyes wide and white.

"So something," said Dylan, "knew enough about this camp to

know that a bomb was buried here and also to know why it was here. And that something didn't want the camp destroyed and so came right into the center of the camp, traced the wire, dug it up and cut it. And then walked right out again."

"Listen," said Rossel, "I'd better go ask."

He started away but Dylan caught his arm.

"Tell them to arm," he said, "and try not to scare hell out of them. I'll be with you as soon as I've spliced this wire."

Rossel nodded and went off, running. Dylan knelt with the metal in his hands.

He began to feel that, by God, he was getting cold. He realized that he'd better go inside soon, but the wire had to be spliced. That was perhaps the most important thing he could do now, splice the wire.

All right, he asked himself for the thousandth time, who cut it? How? Telepathy? Could they somehow control one of us?

No. If they controlled one, then they could control all, and then there would be no need for an attack. But you don't know, you don't really know.

Were they small? Little animals?

Unlikely. Biology said that really intelligent life required a sizable brain and you would

have to expect an alien to be at least as large as a dog. And every form of life on this planet had been screened long before a colony had been allowed in. If any new animals had suddenly shown up, Rossel would certainly know about it.

He would ask Rossel. He would damn sure have to ask Rossel.

He finished splicing the wire and tucked it into the ground. Then he straightened up and, before he went into the radio shack, he pulled out his pistol. He checked it, primed it, and tried to remember the last time he had fired it. He never had—he never had fired a gun.

THE snow began falling near noon. There was nothing anybody could do but stand in the silence and watch it come down in a white rushing wall, and watch the trees and the hills drown in the whiteness, until there was nothing on the planet but the buildings and a few warm lights and the snow.

By one o'clock the visibility was down to zero and Dylan decided to try to contact Bossio again and tell him to hurry. But Bossio still didn't answer. Dylan stared long and thoughtfully out the window through the snow at the gray shrouded shapes of bushes and trees which were be-

ginning to become horrifying. It must be that Bossio was still drunk—maybe sleeping it off before making planetfall on Three. Dylan held no grudge. Bossio was a kid and alone. It took a special kind of guts to take a ship out into space alone, when Things could be waiting . . .

A young girl, pink and lovely in a thick fur jacket, came into the shack and told him breathlessly that her father, Mr. Rush, would like to know if he wanted sentries posted. Dylan hadn't thought about it but he said yes right away, beginning to feel both pleased and irritated at the same time, because now they were coming to him.

He pushed out into the cold and went to find Rossel. With the snow it was bad enough, but if they were still here when the sun went down they wouldn't have a chance. Most of the men were out stripping down their ship and that would take a while. He wondered why Rossel hadn't yet put a call through to Three, asking about room on the ship there. The only answer he could find was that Rossel knew that there was no room, and he wanted to put off the answer as long as possible. And, in a way, you could not blame him.

Rossel was in his cabin with the big, gloomy man—who turned out to be Rush, the one

who had asked about sentries. Rush was methodically cleaning an old hunting rifle. Rossel was surprisingly full of hope.

"Listen, there's a mail ship due in, been due since yesterday. We might get the rest of the folks out on that."

Dylan shrugged. "Don't count on it."

"But they have a contract!"

The soldier grinned.

The big man, Rush, was paying no attention. Quite suddenly he said: "Who cut that wire, Cap?"

DYLAN swung slowly to look at him. "As far as I can figure, an alien cut it."

Rush shook his head. "No. Ain't been no aliens near this camp, and no peculiar animals either. We got a planet-wide radar, and ain't no unidentified ships come near, not since we first landed more'n a year ago." He lifted the rifle and peered through the bore. "Uh-uh. One of us did it."

The man had been thinking. And he knew the planet.

"Telepathy?" asked Dylan.

"Might be."

"Can't see it. You people live too close, you'd notice right away if one of you wasn't . . . himself. And, if they've got one, why not all?"

Rush calmly—at least outwardly calmly—lit his pipe.

There was a strength in this man that Dylan had missed before.

"Don't know," he said gruffly. "But these are aliens, mister. And until I know different I'm keepin' an eye on my neighbor."

He gave Rossel a sour look and Rossel stared back, uncomprehending.

Then Rossel jumped. "My God!"

Dylan moved to quiet him. "Look, is there any animal at all that ever comes near here that's as large as a dog?"

After a pause, Rush answered. "Yep, there's one. The viggle. It's like a reg'lar monkey but with four legs. Biology cleared 'em before we landed. We shoot one now and then when they get pesky." He rose slowly, the rifle held under his arm. "I b'lieve we might just as well go post them sentries."

Dylan wanted to go on with this but there was nothing much else to say. Rossel went with them as far as the radio shack, with a strained expression on his face, to put through that call to Three.

When he was gone Rush asked Dylan, "Where you want them sentries? I got Walt Halloran and Web Eggers and six others lined up."

Dylan stopped and looked around grimly at the circling wall of snow. "You know the site better than I do. Post 'em in

a ring, on rises, within calling distance. Have 'em check with each other every five minutes. I'll go help your people at the ship."

The gloomy man nodded and fluffed up his collar. "Nice day for huntin'," he said, and then he was gone with the snow quickly covering his footprints.

THE Alien lay wrapped in a thick electric cocoon, buried in a wide warm room beneath the base of a tree. The tree served him as antennae; curiously he gazed into a small view-screen and watched the humans come. He saw them fan out, eight of them, and sink down in the snow. He saw that they were armed.

He pulsed thoughtfully, extending a part of himself to absorb a spiced lizard. Since the morning, when the new ship had come, he had been watching steadily, and now it was apparent that the humans were aware of their danger. Undoubtedly they were preparing to leave.

That was unfortunate. The attack was not scheduled until late that night and he could not, of course, press the assault by day. But *flexibility*, he reminded himself sternly, *is the first principle of absorption*, and therefore he moved to alter his plans. A projection reached out to dial several knobs on a large box be-



fore him, and the hour of assault was moved forward to dusk. A glance at the chronometer told him that it was already well into the night on Planet Three, and that the attack there had probably begun.

The Alien felt the first tenuous pulsing of anticipation. He lay quietly, watching the small square lights of windows against the snow, thanking the Unexplainable that matters had been so devised that he would not have to venture out into that miserable cold.

Presently an alarming thought struck him. These humans moved with uncommon speed for intelligent creatures. Even without devices, it was distinctly possible that they could be gone before nightfall. He could take no chance, of course. He spun more dials and pressed a single button, and lay back again comfortably, warmly, to watch the disabling of the colonists' ship.

WHEN Three did not answer, Rossel was nervously gazing at the snow, thinking of other things, and he called again. Several moments later the realization of what was happening struck him like a blow. Three had never once failed to answer. All they had to do when they heard the signal buzz was go into the radio shack and say hello. That was

all they had to do. He called again and again, but nobody answered. There was no static and no interference and he didn't hear a thing. He checked frenziedly through his own apparatus and tried again, but the air was as dead as deep space. He raced out to tell Dylan.

Dylan accepted it. He had known none of the people on Three and what he felt now was a much greater urgency to be out of here. He said hopeful things to Rossel, and then went out to the ship and joined the men in lightening her. About the ship at least, he knew something and he was able to tell them what partitions and frames could go and what would have to stay or the ship would never get off the planet. But even stripped down, it couldn't take them all. When he knew that, he realized that he himself would have to stay here, for it was only then that he thought of Bossio.

Three was dead. Bossio had gone down there some time ago and, if Three was dead and Bossio had not called, then the fact was that Bossio was gone too. For a long, long moment Dylan stood rooted in the snow. More than the fact that he would have to stay here was the unspoken, unalterable, heart-numbing knowledge that Bossio was dead—the one thing that Dylan

could not accept. Bossio was the only friend he had. In all this dog-eared, aimless, ape-run Universe Bossio was all his friendship and his trust.

He left the ship blindly and went back to the settlement. Now the people were quiet and really frightened, and some of the women were beginning to cry. He noticed now that they had begun to look at him with hope as he passed, and in his own grief, humanly, he swore.

Bossio—a big-grinning kid with no parents, no enemies, no grudges—Bossio was already dead because he had come out here and tried to help these people. People who had kicked or ignored him all the days of his life. And, in a short while, Dylan would also stay behind and die to save the life of somebody he never knew and who, twenty-four hours earlier, would have been ashamed to be found in his company. Now, when it was far, far too late, they were coming to the army for help.

BUT in the end, damn it, he could not hate these people. All they had ever wanted was peace, and even though they had never understood that the Universe is unknowable and that you must always have big shoulders, still they had always sought only for peace. If peace leads to no

conflict at all and then decay, well, that was something that had to be learned. So he could not hate these people.

But he could not help them either. He turned from their eyes and went into the radio shack. It had begun to dawn on the women that they might be leaving without their husbands or sons, and he did not want to see the fierce struggle that he was sure would take place. He sat alone and tried, for the last time, to call Bossio.

After a while, an old woman found him and offered him coffee. It was a very decent thing to do, to think of him at a time like this, and he was so suddenly grateful he could only nod. The woman said that he must be cold in that thin army thing and that she had brought along a mackinaw for him. She poured the coffee and left him alone.

They were thinking of him now, he knew, because they were thinking of everyone who had to stay. Throw the dog a bone. Dammit, don't be like that, he told himself. He had not had anything to eat all day and the coffee was warm and strong. He decided he might be of some help at the ship.

It was stripped down now and they were loading. He was startled to see a great group of them standing in the snow, removing their clothes. Then he

understood. The clothes of forty people would change the weight by enough to get a few more aboard. There was no fighting. Some of the women were almost hysterical and a few had refused to go and were still in their cabins, but the process was orderly. Children went automatically, as did the youngest husbands and all the women. The elders were shuffling around in the snow, waving their arms to keep themselves warm. Some of them were laughing to keep their spirits up.

In the end, the ship took forty-six people.

Rossel was one of the ones that would not be going. Dylan saw him standing by the airlock holding his wife in his arms, his face buried in her soft brown hair. A sense of great sympathy, totally unexpected, rose up in Dylan, and a little of the lostness of thirty years went slipping away. These were his people. It was a thing he had never understood before, because he had never once been among men in great trouble. He waited and watched, learning, trying to digest this while there was still time. Then the semi-naked colonists were inside and the airlock closed. But when the ship tried to lift, there was a sharp burning smell—she couldn't get off the ground.

RUSH was sitting hunched over in the snow, his rifle across his knees. He was coated a thick white and if he hadn't spoken Dylan would have stumbled over him. Dylan took out his pistol and sat down.

"What happened?" Rush asked.

"Lining burned out. She's being repaired."

"Coincidence?"

Dylan shook his head.

"How long'll it take to fix?"

"Four—five hours."

"It'll be night by then." Rush paused. "I wonder."

"Seems like they want to wait 'til dark."

"That's what I was figurin'. Could be they ain't got much of a force."

Dylan shrugged. "Also could mean they see better at night. Also could mean they move slow. Also could mean they want the least number of casualties."

Rush was quiet and the snow fell softly on his face, on his eyebrows, where it had begun to gather. At length he said, "You got any idea how they got to the ship?"

Dylan shook his head again. "Nobody saw anything—but they were all pretty busy. Your theory about it maybe being one of us is beginning to look pretty good."

The colonist took off his gloves, lit a cigarette. The flame was

strong and piercing and Dylan moved to check him, but stopped. It didn't make much difference. The aliens knew where they were.

And this is right where we're gonna be, he thought.

"You know," he said suddenly, speaking mostly to himself, "I been in the army thirty years, and this is the first time I was ever in a fight. Once in a while we used to chase smugglers—never caught any, their ships were new—used to cut out after unlicensed ships, used to do all kinds of piddling things like that. But I never shot at anybody."

Rush was looking off into the woods. "Maybe the mail ship will come in."

Dylan nodded.

"They got a franchise, dammit. They got to deliver as long as they's a colony here."

When Dylan didn't answer, he said almost appealingly: "Some of those guys would walk barefoot through hell for a buck."

"Maybe," Dylan said. After all, why not let him hope? There were four long hours left.

NOW he began to look down into himself, curiously, because he himself was utterly without hope and yet he was no longer really afraid. It was a surprising thing when you looked at it coldly, and he guessed that, after all, it was because of the

thirty years. A part of him had waited for this. Some crazy part of him was ready—even after all this time—even excited about being in a fight. Well, what the hell, he marveled. And then he realized that the rest of him was awakening too, and he saw that this job was really his . . . that he had always been, in truth, a soldier.

Dylan sat, finding himself, in the snow. Once long ago he had read about some fool who didn't want to die in bed, old and feeble. This character wanted to reach the height of his powers and then explode in a grand way—"in Technicolor," the man had said. Explode in Technicolor. It was meant to be funny, of course, but he had always remembered it, and he realized now that that was a small part of what he was feeling. The rest of it was that he was a soldier.

Barbarian, said a small voice, *primitive*. But he couldn't listen.

"Say, Cap," Rush was saying, "it's getting a mite chilly. I understand you got a bottle."

"Sure," he said cheerfully, "near forgot it." He pulled it out and gave it to Rush. The colonist broke the seal and drank, saying to Dylan half-seriously, half-humorously: "One for the road."

Beneath them the planet revolved and the night came on. They waited, speaking briefly, while the unseen sun went down.

And faintly, dimly through the snow, they heard at last the muffled beating of a ship. It passed overhead and they were sighting their guns before they recognized it. It was the mailship.

They listened while she settled in a field by the camp, and Rush was pounding Dylan's arm. "She will take us all," Rush was shouting, "she'll take us all," and Dylan too was grinning, and then he saw a thing.

SMALL and shadowy, white-coated and almost invisible, the thing had come out of the woods and was moving toward

them, bobbing and shuffling in the silent snow.

Dylan fired instinctively, because the thing had four arms and was coming right at him. He fired again. This time he hit it and the thing fell, but almost immediately it was up and lurching rapidly back into the trees. It was gone before Dylan could fire again.

They both lay flat in the snow, half-buried. From the camp there were now no sounds at all. For the first time today Dylan could hear the snow fall.

"Did you get a good look?"

Rush grunted, relaxing.



"Should've saved your fire, son. Looked like one o' them monk-eyes."

But there was something wrong. There was something that Dylan had heard in the quickness of the moment which he could not remember but which was very wrong.

"Listen," he said, suddenly placing it. "Dammit, that was no monkey."

"Easy—"

"I hit it. I hit it cold. It made a noise."

Rush was staring at him.

"Didn't you hear?" Dylan cried.

"No. Your gun was by my ear."

And then Dylan was up and running, hunched over, across the snow to where the thing had fallen. He had seen a piece of it break off when the bolt struck, and now in the snow he picked up a paw and brought it back to Rush. He saw right away there was no blood. The skin was real and furry all right but there was no blood. Because the bone was steel and the muscles were springs and the thing had been a robot.

THE Alien rose up from his cot, whistling with annoyance. When that ship had come in, his attention had been distracted from one of the robots, and of course the miserable thing had



gone blundering right out into the humans. He thought for a while that the humans would overlook it—the seeing was poor and they undoubtedly would still think of it as animal, even with its firing ports open—but then he checked the robot and saw that a piece was missing and knew that the humans had found it. Well, he thought unhappily, flowing into his suit, no chance now to disable that other ship. The humans would never let another animal near.

And therefore — for he was, above all, a flexible being—he would proceed to another plan. The settlement would have to be detonated. And for that he would have to leave his own shelter and go out in that miserable cold and lie down in one of his bunkers which was much farther away.

No need to risk blowing himself up with his own bombs, but still, that awful cold.

He dismissed his regrets and buckled his suit into place. It carried him up the stairs and bore him out into the snow. After one whiff of the cold, he snapped his viewplate shut and immediately, as he had expected, it began to film with snow. Well, no matter, he would guide the unit by coordinates and it would find the bunker itself. No need for caution now. The plan was nearly ended.

In spite of his recent setback, the Alien lay back and allowed himself the satisfaction of a full tremble. The plan had worked very nearly to perfection, as of course it should, and he delighted in the contemplation of it.

WHEN the humans were first detected, in the region of Bootes, much thought had gone into the proper method of learning their technology without being discovered themselves. There was little purpose in destroying the humans without first learning from them. Life was really a remarkable thing — one never knew what critical secrets a star-borne race possessed. Hence the robots. And it was an extraordinary plan, an elegant plan. The Alien trembled again.

The humans were moving out-

ward toward the Rim, their base was apparently somewhere beyond Centaurus. Therefore, a ring of defense was thrown up on most of the habitable worlds toward which the humans were coming—oh, a delightful plan—and the humans came down one by one and never realized that there was any defense at all.

With a cleverness which was almost excruciating, the Aliens had carefully selected a number of animals native to each world, and then constructed robot duplicates. So simple then to place the robots down on a world with a single Director, then wait . . . for the humans to inhabit. Naturally the humans screened all the animals and scouted a planet pretty thoroughly before they set up a colony. Naturally their snares and their hunters caught no robots, and never found the deep-buried Alien Director.

Then the humans relaxed and began to make homes, never realizing that in among the animals which gamboled playfully in the trees there was one which did not gambol, but watched. Never once noticing the monkey-like animals or the small thing like a rabbit which was a camera eye, or the thing like a rat which took chemical samples, or the thing like a lizard which cut wires.

The Alien rumbled on through the snow, trembling so much now

with ecstasy and anticipation that the suit which bore him almost lost its balance. He very nearly fell over before he stopped trembling, and then he contained himself. In a little while, a very little while, there would be time enough for trembling.

THEY could've been here 'til the sun went out," Rush said, "and we never would've known."

"I wonder how much they've found out," Dylan said.

Rush was holding the paw.

"Pretty near everything, I guess. This stuff don't stop at monkeys. Could be any size, any kind . . . look, let's get down into camp and tell 'em."

Dylan rose slowly to a kneeling position, peering dazedly out into the far white trees. His mind was turning over and over, around and around, like a roulette wheel. But, at the center of his mind, there was one thought, and it was rising up slowly now, through the waste and waiting of the years. He felt a vague surprise.

"Gettin' kind of dark," he said.

Rush swore. "Let's go. Let's get out of here." He tugged once at Dylan's arm and started off on his knees.

Dylan said: "Wait."

Rush stopped. Through the snow he tried to see Dylan's eyes. The soldier was still looking into the woods.

Dylan's voice was halting and almost inaudible. "They know everything about us. We don't know anything about them. They're probably sittin' out there right now, a swarm of 'em there behind those trees, waitin' for it to get real nice and dark."

He paused. "If I could get just one."

It was totally unexpected, to Dylan as well as Rush. The time for this sort of thing was past, the age was done, and for a long while neither of them fully understood.

"C'mon," Rush said with exasperation.

Dylan shook his head, marveling at himself. "I'll be with you in a little while."

Rush came near and looked questioningly into his face.

"Listen," Dylan said hurriedly, "we only need one. If we could just get one back to a lab we'd at least have some clue to what they are. This way we don't know anything. We can't just cut and run." He struggled with the unfamiliar, time-lost words. "We got to make a stand."

HE turned from Rush and lay forward on his belly in the snow. He could feel his heart beating against the soft white cushion beneath him. There was no time to look at this calmly and he was glad of that. He spent

some time being very much afraid of the unknown things beyond the trees, but even then he realized that this was the one thing in his life he had to do.

It is not a matter of dying, he thought, but of *doing*. Sooner or later a man must do a thing which justifies his life, or the life is not worth living. The long cold line of his existence had reached this point, here and now in the snow at this moment. He would go on from here as a man . . . or not at all.

Rush had sat down beside him, beginning to understand, watching without words. He was an old man. Like all Earthmen, he had never fought with his hands. He had not fought the land, or the tides, or the weather, or any of the million bitter sicknesses which Man had grown up fighting, and he was beginning to realize that somewhere along the line he had been betrayed. Now, with a dead paw of the enemy in his hand, he did not feel like a man. And he was ready to fight now, but it was much too late and he saw with a vast leaden shame that he did not know how, could not even begin.

"Can I help?" he said.

Dylan shook his head. "Go back and let them know about the robots, and, if the ship is ready to leave before I get back, well—then good luck."

He started to slither forward on his belly but Rush reached out and grabbed him, holding with one hand to peace and gentleness and the soft days which were ending.

"Listen," he said, "you don't owe anybody."

Dylan stared at him with surprise. "I know," he said, and then he slipped up over the mound before him and headed for the trees.

NOW what he needed was luck. Just good, plain old luck. He didn't know where they were or how many there were or what kinds there were, and the chances were good that one of them was watching him right now. Well, then he needed some luck. He inched forward slowly, carefully, watching the oncoming line of trees. The snow was falling on him in big, leafy flakes and that was fine, because the blackness of his suit was much too distinct and the more white he was the better. Even so, it was becoming quite dark by now and he thought he had a chance. He reached the first tree.

Silently he slipped off his heavy cap. The visor got in his way and above all he must be able to see. He let the snow thicken on his hair before he raised himself on his elbows and looked outward.

There was nothing but the snow and the dead quiet and the stark white boles of the trees. He slid past the first trunk to the next, moving forward on his elbows with his pistol in his right hand. His elbow struck a rock and it hurt and his face was freezing. Once he rubbed snow from his eyebrows. Then he came through the trees and lay down before a slight rise, thinking.

Better to go around than over. But if anything is watching, it is most likely watching from above.

Therefore, go around and come back up from behind. Yes.

His nose had begun to run. With great care he crawled among some large rocks, hoping against hope that he would not sneeze. Why had nothing seen him? Was something following him now? He turned to look behind him but it was darker now and becoming difficult to see. But he would have to look behind him more often.

He was moving down a gorge. There were large trees above him and he needed their shelter, but he could not risk slipping down the sides of the gorge. And far off, weakly, out of the gray cold ahead, he heard a noise.

He lay face down in the snow, listening. With a slow, thick shuffle, a thing was moving through the trees before him. In a mo-

ment he saw that it was not coming toward him. He lifted his head but saw nothing. Much more slowly now, he crawled again. The thing was moving down the left side of the gorge ahead, coming away from the rise he had circled. It was moving without caution and he worried that if he did not hurry, he would lose it. But for the life of him he couldn't stand up.

THE soldier went forward on his hands and knees. When his clothes hung down, the freezing cold entered his throat and shocked his body, which was sweating. He shifted his gun to his gloved hand and blew on the bare fingers of his right, still crawling. When he reached the other end of the gorge, he stood upright against a rock wall and looked in the direction of the shuffling thing.

He saw it just as it turned. It was a great black lump on a platform. The platform had legs and the thing was plodding methodically upon a path which would bring it past him. It had come down from the rise and was rounding the gorge when Dylan saw it. It did not see him.

If he had not ducked quickly and brought up his gun, the monkey would not have seen him either, but there was no time for regret. The monkey was several

yards to the right of the lump on the platform when he heard it start running, and he had to look up this time and saw it leaping toward him over the snow.

All right, he said to himself. His first shot took the monkey in the head, where the eyes were. As the thing crashed over, there was a hiss and a stench, and flame seared into his shoulder and the side of his face. He lurched to the side, trying to see, his gun at arm's-length as the lump on the platform spun toward him. He fired four times. Three bolts went home in the lump, the fourth tore a leg off the platform and the whole thing fell over.

Dylan crawled painfully behind a rock, his left arm useless. The silence had come back again and he waited, but neither of the alien things moved. Nothing else moved in the woods around him. He turned his face up to the falling snow and let it come soothingly upon the awful wound in his side.

After a while he looked out at the monkey. It had risen to a sitting position but was frozen in the motion of rising. It had ceased to function when he hit the lump. Out of the numbness and the pain, he felt a great gladness rising.

The guide. He had killed the guide.

HE would not be cautious any more. Maybe some of the other robots were self-directing and dangerous, but they could be handled. He went to the lump, stared at it without feeling. A black doughy bulge was swelling out through one of the holes.

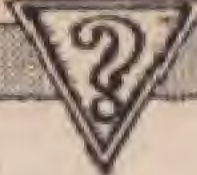
It was too big to carry, but he would have to take something back. He went over and took the monkey by a stiff jutting arm and began dragging it back toward the village.

Now he began to stumble. It was dark and he was very tired. But the steel he had been forging in his breast was complete, and the days which were coming would be days full of living. He would walk with big shoulders and he would not bother to question, because Man was not born to live out his days at home, by the fire.


It was a very big thing that Dylan had learned and he could not express it, but he knew it all the same, knew it beyond understanding. And so he went home to his people.

One by one, increasing, in the wee black corner of space which Man had taken for his own, other men were learning. And the snow fell and the planets whirled, and, when it was spring where Dylan had fought, men were already leaping back out to the stars.

—MICHAEL SHAARA



What Strange Powers Did The Ancients Possess?



EVERY important discovery relating to mind power, sound thinking and cause and effect, as applied to self-advancement, was known centuries ago, before the masses could read and write.

Much has been written about the wise men of old. A popular fallacy has it that their secrets of personal power and successful living were lost to the world. Knowledge of nature's laws, accumulated through the ages, is never lost. At times the great truths possessed by the sages were hidden from unscrupulous men in high places, but never destroyed.

Why Were Their Secrets Closely Guarded?

Only recently, as time is measured; not more than twenty generations ago, less than 1/100th of 1% of the earth's people were thought capable of receiving basic knowledge about the laws of life, for it is an elementary truism that knowledge is power and that power cannot be entrusted to the ignorant and the unworthy.

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